

CATALOG



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Title IX Reporting

Indiana University of Pennsylvania and its faculty are committed to assuring a safe and productive educational environment for all students. In order to meet this commitment and to comply with Title IX of the Education Amendments of 1972 and guidance from the Office for Civil Rights, the university requires faculty members to report incidents of sexual violence shared by students to the University's Title IX Coordinator. The only exceptions to the faculty member's reporting obligation are when incidents of sexual violence are communicated by a student during a classroom discussion, in a writing assignment for a class, or as part of a university-approved research project.

Faculty members are obligated to report sexual violence or any other abuse of a student who was, or is, a child (a person under 18 years of age) when the abuse allegedly occurred to the Department of Human Services, at 1-800-932-0313, and University Police, at 724-357-2141.

Information regarding the reporting of sexual violence and the resources that are available to victims of sexual violence is set forth at: www.iup.edu/socialequity/policies/title-ix

Please direct all general inquiries regarding equal opportunity and affirmative action to Office of Social Equity

Delaney Hall, Suite B17
920 Grant Street
Indiana, PA 15705
Telephone: 724-357-3402
Fax: 724-357-3404

TD: Telecommunications Device available in the
Department for Disability Access and Advising, 724-357-4067 (V/TD)
(8:00 a.m.-4:30 p.m., Monday through Friday)

IUP ensures compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act through the provision of program access accommodations. Please direct inquiries regarding accommodations for persons with disabilities to:

Student Concerns:

Director, Department for Disability Access and Advising
504 Coordinator/ADA Student Concerns Coordinator
201 Pratt Dr., Room 216

Indiana, PA 15705
Telephone: 724-357-4067

Employee Concerns:

Office of Human Resources
G-8 Sutton Hall
1011 South Drive
Indiana, PA 15705
Telephone: 724-357-2431
Fax: 724-357-2685

Specific inquiries regarding Title IX should be directed to:

Office of Social Equity
Delaney Hall, Suite B17
920 Grant Street
Indiana, PA 15705
Telephone: 724-357-3402
Fax: 724-357-3404

The university publishes an online student handbook, *The Source: A Student Policy Guide*, which is a companion to this catalog. The handbook contains detailed information on the policies mentioned on this page. It is accessible to all enrolled students at: www.iup.edu/studentconduct/thefsource.

Questions regarding the Sexual Harassment and Sexual Violence Policy or complaint procedures, should be directed to:

Chief Diversity and Inclusion Officer and Title IX Coordinator

ADA/Section 504 Coordinator

Delaney Hall, Suite B17
Indiana, PA 15705
Telephone: 724-357-3402.

The IUP Sexual Harassment and Sexual Violence Policy is accessible at the website iup.edu/socialequity/policies/sexual-harassment-and-sexual-violence/.

Statement of Non-Discrimination

Indiana University of Pennsylvania is committed to equal opportunity and affirmative action for its students, employees, and applicants. The university is committed to providing equal educational and employment rights to all persons without regard to race, color, sex, religion, national origin, sexual orientation, age, disability, or veteran's status. Each member of the university community has a right to study and work in an environment free from any form of racial, ethnic, and sexual discrimination. In accordance with federal and state laws, the university will not tolerate racial or ethnic discrimination or discrimination on the basis of disability.

This policy is placed in this document in accordance with state and federal laws including Titles VI and VII of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972, Sections 503 and 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, and the Civil Rights Act of 1991 as well as all applicable federal and state executive orders. This policy extends to disabled veterans and veterans of the Vietnam era.

IUP Civility Statement

As a university of different peoples and perspectives, IUP aspires to promote the growth of all people in their academic, professional, social, and personal lives. Students, faculty, and staff join together to create a community where people exchange ideas, listen to one another with consideration and respect, and are committed to fostering civility through university structures, policies, and procedures. We, as members of the university, strive to achieve the following individual commitments:

- To strengthen the university for academic success, I will act honestly, take responsibility for my behavior and continuous learning, and respect the freedom of other to express their views.

- To foster an environment for personal growth, I will honor and take care of my body, mind, and character. I will be helpful to others and respect their rights. I will discourage intolerance, hatred, and injustice, and promote constructive resolution of conflict
- To contribute to the future, I will strive for the betterment of the community: myself, my university, my nation, and the world.

IUP is one of the largest members of Pennsylvania's State System of Higher Education, and it was the first one of the State System schools to grant doctoral degrees

For information about the System and its other member universities, visit www.passhe.edu

Sexual Discrimination/Misconduct Policy and Resources

The university is committed to providing a safe and positive living, learning, and work environment that is free from sexual discrimination and other prohibited sexual misconduct. Students, employees, and university affiliates are expected to conduct themselves in a manner that does not infringe upon the rights of others. The Sexual Discrimination/Misconduct Policy provides detailed definitions, reporting guidelines, and complaint resolution procedures. It can be found at <https://www.iup.edu/social-equity/policies/sexual-discrimination-and-sexual-misconduct/>. The policy is applicable to all students and employees of the university, as well as designated volunteers, contractors, and vendors. Sexual discrimination and misconduct include: sexual harassment, nonconsensual sexual contact, non-consensual sexual intercourse, sexual exploitation, and retaliation. Resources and support services are available to the university community. Visit Title IX Reporting for more information. The Social Equity and Title IX Office can be reached at 724-357-3402, social-equity@iup.edu, title-ix@iup.edu, or in B-17 Delaney Hall.

IUP Site Locations and Regional Campuses

- Fees
- Rules and Regulations Concerning Student Behavior
- Northpointe Regional Campus
- Punxsutawney Regional Campus
- IUP Pittsburgh East
- IUP Site Locations
- IUP Centers and Institutes

Richard J. Muth, Director, Regional Campuses

IUP operates three regional campuses, one in Punxsutawney, one at Northpointe in Freeport, and one at Pittsburgh East in Wilkins Township. The first regional campus was established in 1962 in Punxsutawney. The following year, the Armstrong campus in Kittanning was opened. In the summer of 2005, the Armstrong campus relocated to a new facility in Freeport and became the Northpointe Regional Campus. The Pittsburgh East Campus, formerly named the Monroeville Center, was established in 1996.

Control of the regional campuses is directly vested with the IUP administration and Council of Trustees. Regional campuses carry full accreditation as integral parts of the undergraduate and graduate programs of IUP.

Programs of Study

All three locations offer courses and programs at the undergraduate level, graduate level, or both. The Punxsutawney campus also hosts certificate and associate programs in Culinary Arts and Baking & Pastry, as well as Clinical Medical Assistant certificate programs. All three locations also host conferences and non-credit workshops.

Faculty advisors and administrators at the regional campuses are available to advise and support students on their instructional programs.

Admission

Any prospective student who wishes to attend a regional campus may apply for admission by applying online through the IUP Admissions website, www.iup.edu/admissions.

Fees

Northpointe and Punxsutawney students are not required to pay the activity fee or wellness fee. Please see the Finances section of this catalog for further information on other fees payable by all IUP students.

Rules and Regulations Concerning Student Behavior

Students at the regional campuses are subject to the same rules and regulations as students at the Indiana campus. More information is available at www.iup.edu/studentconduct/ and in the Undergraduate or Graduate Catalogs.

Northpointe Regional Campus

The Northpointe Regional Campus is a commuter campus located at Exit 18 off Route 28 with the primary mission of providing local access to higher education opportunities. These greater opportunities for residents foster economic and professional growth for the region. Both credit and noncredit programs are offered at the Northpointe campus, with special emphasis on certificate and associate, bachelor's, and master's degrees. Required courses for the first year and, in some majors, the second year are also offered for local IUP students.

This campus is also the host for the IUP Respiratory Care program. Junior and Senior students in this program attend the Northpointe Regional Campus to complete degree requirements.

Requests for additional information may be made to the administrative office of the campus. The address follows:

IUP Northpointe Regional Campus
167 Northpointe Boulevard
Freeport, PA 16229
724-294-3300
northpointe-campus@iup.edu
www.iup.edu/northpointe

Punxsutawney Regional Campus

The focus of the Punxsutawney Regional Campus is to offer academic opportunities needed locally, regionally, and across the commonwealth. Students will be able to complete their first year of classes in most degree programs as well as complete a growing number of certificate and associate degree programs. Online and other technology-offered classes will increase opportunities and the option to increase the time enrolled in classes on the Punxsutawney Campus.

The Punxsutawney Regional Campus has a living center supporting a residential college experience. The campus has a full-service dining common where meals are served when the university is in session. The same food service contractors serving the Indiana campus operate the Punxsutawney dining program.

To request additional information about the Punxsutawney Regional Campus, please contact

IUP Punxsutawney Regional Campus
1012 Winslow Street
Punxsutawney, PA 15767
814-938-6711
iup-pxy@iup.edu
www.iup.edu/pxy

IUP Pittsburgh East

This instructional site is located on the ninth floor of building No. 4 in Penn Center East. IUP offers 11 graduate degrees at both the master's and doctoral level at this location, as well as several noncredit programs and workshops.

Requests for additional information may be made to the administrative office. The address is:

IUP Pittsburgh East
400 Penn Center Boulevard
Building 4, Suite 900

Pittsburgh-East@iup.edu
www.iup.edu/pittsburgh-east

IUP SITE LOCATIONS

IUP Academy of Culinary Arts 125 S. Gilpin St. Punxsutawney, PA 15767	Dixon University Center 2986 N. 2nd St. Harrisburg, PA 17110
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IUP Police Academy California University of Pennsylvania 250 University Ave. California, PA 15419	The Arab American University (AAU) Jenin-Oakestube 240 Jenin, 3 Zababdeh Israel
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IUP Police Academy Robert Morris University 6001 University Blvd. Moon Township, PA 15108	Southwestern University of Finance and Economics 555, Liutai Ave. Wenjiang District Chendgu, Sichuan P.R. China, 611130
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CCAC, Boyce Campus 595 Beatty Rd. Monroeville, PA 15146	People's Education Society University 100 Feet Ring Rd. BSK III Stage Bangalore - 560085 India
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Anti-Hazing Policy

The university prohibits hazing. The Anti-Hazing Policy applies to acts conducted on or off campus if such acts are deemed to constitute hazing under the policy or Pennsylvania law. Hazing is dangerous and detrimental to the self-esteem and well-being of students, degrades the values of the involved organization, and creates an environment of disrespect that contradicts the university's commitment to, and statement of, civility. To read the policy in its entirety, visit www.iup.edu/leadership/resources/policies/hazing/anti-hazing-policy. The policy is housed under the Center for Multicultural Student Leadership and Engagement, 128 Elkin Hall, 724-357-2598.

Retaliation

Retaliation against individuals reporting violations of any university policy, or participating in an investigative or administrative process, will not be tolerated and will be addressed through the appropriate university process.

Student Rights

- Students Rights under the Family Educational Rights and Privacy Act (FERPA)
- Student Rights/Directory Information
- Non-Discrimination, Harassment , and Hazing Policy

Students Rights under the Family Educational Rights and Privacy Act (FERPA)

FERPA affords students certain rights with respect to their education records. They follow:

1. The right to inspect and review the student's education records within 45 days of the day the university receives a request for access. Students should submit to the registrar, college dean, department chair, or other appropriate official written requests that identify the records they wish to inspect. The university official will arrange for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the official to whom the request was submitted, that official will advise the student to whom to direct the request.
2. The right to request amendment of the student's education records that he/she believes are inaccurate or misleading. Students should submit such requests in writing to the appropriate university official. The written request must clearly identify the part of the record the student wants to be changed and must specify why it is inaccurate or misleading. If the university decides not to amend the record as requested, the student will be notified of the decision by a university official who will advise the student of his/her right to a hearing regarding the requested amendment. Additional information regarding hearing procedures will be provided to the student when he or she is notified of the right to a hearing.
3. The right to consent to disclosures of personally identifiable information in the student's education records, except to the extent that FERPA authorizes disclosure without consent. One exception that permits disclosure without consent is to school officials with legitimate educational interests. A school official is a person employed by the university in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person with whom the university has contracted (such as an attorney, auditor, or collection agent); a person serving on the Council of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his/her tasks. A school official has a legitimate educational interest if the official needs to review an education record to fulfill his/her professional responsibility. This includes school officials in other institutions to which a student is seeking admission or intends to enroll.
4. The right to file a complaint with the US Department of Education concerning alleged failures by IUP to comply with the requirements of FERPA. The name and address of the office that administers FERPA follows: Family Policy Compliance Office, US Department of Education, 400 Maryland Avenue, SW, Washington, DC 20202-4605.

Student Rights/Directory Information

The following information is considered directory information under the Family Educational Rights and Privacy Act and may be released without the student's permission: name, address, telephone number, dates and status of attendance (enrolled, part-time/full-time) and previous institutions attended, degrees conferred, major field of study and class, awards and honors, past and present participation in officially recognized sports and activities as well as physical factors of athletes (such as height and weight), and e-mail username.

Students may request that directory information not be publicly released by completing a nondisclosure request, available in the Office of the Registrar, Clark Hall. This will result in the student's directory information being removed from the "Find People" on-line directory on the IUP website. Upon receipt of this signed form in the Office of the Registrar, all information will be withheld, even beyond graduation, unless the student requests in writing that this nondisclosure request be rescinded.

Non-Discrimination, Harassment , and Hazing Policy

Discrimination based on age, color, national origin, race, religion, disability, veteran's status, sex, sexual orientation, or gender identity is prohibited. All employees, students, and those outside of the university who work in or with the university, including vendors and volunteers, must comply with applicable federal, state, and local laws as well as government regulations regarding discrimination.

Acts of discrimination, harassment or retaliation will not be tolerated, and alleged violations of this policy will be investigated following the steps detailed in the policy. Violators of this policy will be disciplined consistent with this policy and applicable labor agreements. Discipline may include but is not limited to a warning, transfer, suspension, termination, or expulsion from the university.

Complaints of sexual harassment or sexual violence, including sexual assault, sexual exploitation, dating violence, domestic violence, and stalking are processed under the university's Sexual Misconduct policy and related procedures. For more information about the university's Title IX program, please refer to the University's Social Equity website at: www.iup.edu/socialequality/policies/.

No chapter, team, club, colony, unit, student, alumnus/alumna, advisors, and/or other persons associated with a university recognized or sponsored organization shall conduct or condone any activity which can be described as "hazing."

The university reserves the right to adjudicate any university recognized or sponsored organization for any action (or any inaction in a situation where the organization has a duty to act- for example, failing to intervene when a policy violation and/or crime is occurring) that an ordinary, reasonable, intelligent individual or group of individuals know or should know might result in corrective or disciplinary action

Definitions

Discrimination: An adverse employment or academic action or decision that is based on or motivated by an individual's membership in a protected class that is sufficiently severe, persistent, or pervasive so as to substantially limit or interfere with an individual's work environment, educational performance, participation in extracurricular activities or equal access to the university's resources and opportunities.

Harassment: Any conduct directed toward an individual based on membership in a protected class that is sufficiently severe, persistent, or pervasive so as to substantially limit or interfere with an individual's work environment, educational performance, participation in extracurricular activities or equal access to the university's resources and opportunities. Harassment is a form of discrimination. Constitutionally protected expression cannot be considered harassment under this policy.

Hazing: IUP defines hazing as "any action, situation, activity or complicity in activity, which recklessly or intentionally endangers the mental, emotional, and/or physical health or safety of a student or alumnus or which willfully destroys or removes public or private property for the purpose of initiation or admission into or affiliation with, or as a condition for continued membership in, any university organization."

Organization: The term organization in this policy refers to organizations that are either recognized or sponsored by the university

Recognized Organizations: A "recognized organization" is defined as any student organization which has completed the application process for recognition or re-recognition as outlined by the Center for Multicultural Student Leadership and Engagement (MCSLE) and which has been approved for recognition by IUP's Student Government Association and MCSLE.

Sponsored Organizations: A "sponsored organization" is defined as any organization that receives human, financial, and/or material support, guidance, and/or benefit from the university

Policy Statement: Recognized or sponsored organizations include, but are not limited to: a fraternity, sorority, association, corporation, order, society, corps, club, or service, social or similar group, whose members are primarily students.

Complainant: The individual who is alleging the occurrence of discrimination.

Respondent: The individual against whom allegations of discrimination, harassment or retaliation have been made.

Retaliation Prohibited

Retaliation is a form of discrimination. The university prohibits retaliation against any party who, in good faith, reports, assists or participates in an investigation under this policy.

Retaliation, if found to have occurred, is considered an offense separate from the original complaint of discrimination or harassment. The university will take disciplinary action against those who participate in retaliatory behavior. Individuals who believe they have been subjected to retaliation should report the conduct to the Office of Social Equity as promptly as possible.

Complaint Process for Allegations Against Students

The procedures for processing a discrimination, harassment or retaliation complaint against a student (student to student or allegations in which the alleged offender is a student) are addressed through a formal student conduct proceeding, which is described in and governed by the Student Conduct Policies and Regulations. For more information, please refer to the Office of Student Support and Community Standards website on policies: www.iup.edu/student-conduct/policies or contact the office at 724-357-1264 for resources and support.

Complaint Process for Allegations Against Employees, Vendors, and Volunteers

Any member of the university community who believes he or she may have experienced discrimination, harassment or retaliation in violation of this policy by an employee, vendor or volunteer may use either the informal resolution process or the formal complaint process, or both. The informal resolution and formal complaint processes described in this policy are not mutually exclusive and neither is required as a pre-condition for choosing the other; however, they cannot both be used at the same time. Anonymous complaints will be individually assessed for credibility and with regard to the extent they can be investigated.

1. **Informal Resolution:** This process may be used as a prelude to filing a formal complaint or as an alternative. It is not necessary that this option be used. Anyone who believes that he or she has been subject to discrimination, harassment or retaliation may immediately file a formal complaint as described below. Informal resolution may be an appropriate choice when the conduct involved is not of a serious or repetitive nature, and disciplinary action is not required to remedy the situation. No formal investigation is involved in the informal resolution process.
 1. **Reporting:** Individuals wishing to use the informal resolution process should contact the Office of Social Equity. If individuals in the Office of Social Equity or the designee appointed by the Office of Social Equity are part of the alleged discrimination, harassment, or retaliation, the Associate Vice President for Human Resources should be contacted instead.
 2. **Assistance:** The individual is provided assistance in attempting to resolve possible discrimination if the individual does not wish to file a formal complaint. Such assistance includes strategies for the individual to effectively inform the offending party that his or her behavior is offensive and should cease. Action should be taken by an appropriate university official to stop the offensive conduct, modify the situation in which the offensive conduct occurred, or begin mediation between the parties. However, the university may take more formal action to ensure an environment free of discrimination.
 3. **Time frame:** The Office of Social Equity or designee shall make a good faith effort, with the complainant's written consent, to resolve the complaint in a timely manner consistent with the complexity and severity of the matter. Any resolution efforts extending beyond 15 working days shall be noted.
2. **Formal Complaint:** The goal of the formal complaint process is to reach an official determination as to whether a respondent(s) has violated this policy. As a part of the formal complaint process, an adequate, reliable and impartial investigation will be conducted into the allegations of the complaint and a report of the investigation prepared.
 1. **Reporting:** Complaints must be made to the university's Office of Social Equity. The complaint should include the complainant's name and contact information; the name of the person(s) directly responsible for the alleged violation; a detailed description of the conduct or event that is the basis of the alleged violation; the date(s) and location(s) of the occurrence(s); the names of any witnesses to the occurrence(s); the resolution sought; and, any documents or information that is relevant to the complaint. While an investigation may begin on the basis of an oral complaint, the complainant is strongly encouraged to file a written complaint. Complaints should be filed as soon as possible after the conduct giving rise to the complaint, but no later than 30 working days after the event occurred. This deadline may be extended by the designated investigator based on extenuating circumstances.
 2. **Notice of Allegation:** As part of the investigation process, the respondent shall be provided with a copy or summary of the allegations and be given the opportunity to respond verbally and/ or in writing within a reasonable time frame. The response should include the names of any witnesses or other evidence the respondent may wish to have considered.
 3. **Investigation:** The fact-finding process is intended to be an internal investigation, not an adjudicatory process. The strict rules of evidence and criminal or civil procedure do not apply. The complainant and the respondent may present any document or information that is believed to be relevant to the complaint. Any persons thought to have information relevant to the complaint shall be interviewed and such interviews shall be appropriately documented. The respondent and the complainant are permitted to have a union representative present as an advisor, if applicable. Allegations or matters of conduct outside the scope of this policy may be referred to the appropriate official for review and action.
 4. **Timing:** Within 10 working days of receipt of a complaint, an investigation of the complaint will be undertaken. The investigation of a complaint will be concluded as soon as possible after receipt of the complaint, consistent with the complexity and severity of the matter. For investigations exceeding 60 days, a justification for the delay shall be included in the written report.
 5. **Written Report:** Upon completion of the investigation, a written report will be issued. The report shall include: a statement of the findings of fact, including an analysis of the facts discovered during the investigation; a statement of conclusions the investigator has drawn, if any; and any other relevant information deemed appropriate to the findings of fact. Both the complainant and the respondent shall be provided an opportunity to review a summary of the written report and submit comments.
 6. **Review:** The President or designee, as appropriate, will review the summary of the written report, the written report and any comments submitted by the complainant or respondent. The President or designee may request further investigation; dismiss the

complaint if the results of the completed investigation are inconclusive or there is insufficient evidence, based on a preponderance of the evidence, to support the allegation(s); or find this policy was violated. The President or designee will determine what appropriate action, if any, will be taken. A pre-disciplinary conference will be held prior to issuing any discipline, consistent with the disciplinary procedures proscribed in any applicable labor agreement. The university shall take steps to prevent the recurrence of discrimination, harassment or retaliation under this policy and to correct any discriminatory effects on the complainant and others, if appropriate.

7. **Notice of Outcome:** Once the President or designee has rendered a decision and notified the respondent in writing, the formal investigator shall, to the extent permitted by the Family Educational Rights and Privacy Act, notify the complainant, in writing, of the results of the investigation and the action taken by the university to resolve the complaint. At the conclusion of the formal investigation, all records from the formal resolution process will be retained in accordance with the university's records retention policy. records of investigations will not be maintained in personnel files unless formal disciplinary action is taken.
3. **Appeal and Reporting to Outside Entities:** The respondent may appeal any discipline rendered as provided in the grievance procedures of his or her respective labor agreement or the Board of Governors' Merit Principles Policy (Policy 1983-01-A), as applicable. The complainant has the option at any time during informal resolution or formal complaint process to file a complaint through an external public agency responsible for enforcing laws regarding discrimination. Generally this filing should take place within 180 days beginning with the date of the last alleged incident.

Equal Employment Opportunity Commission, www.eeoc.gov

1000 Liberty Avenue, Pittsburgh, PA 15222, 412-644-3444

Pennsylvania Human Relations Commission, www.phrc.state.pa.us

300 Liberty Ave., State Office Bldg., 11th Floor, Pittsburgh, PA 15222 (412) 565-5395

US Department of Education, Office for Civil Rights, www.ed.gov/about/offices/list/ocr/index.html

400 Maryland Avenue, Washington DC, 20202-5151, (800) 421-3481

4. **Privacy:** The university will endeavor to honor an individual's desire for privacy, to the extent permitted by law, which still allows the university to provide an environment free of discrimination. Relevant information will be provided to those persons who need to know in order to achieve a timely resolution of the complaint.
5. **False Complaints:** Any person who knowingly and intentionally files a false complaint under this policy or any person who knowingly and intentionally makes false statements within the course of the investigation is subject to disciplinary action up to and including termination of employment.
6. **Dissemination of Policy:** The policy will be posted on the university's website and copies will be made available to all members of the university community, including employees (administrators, faculty, and staff), volunteers, students, vendors and all applicants for admission or employment upon request. Periodic notices will be sent to employees and students which will include referral information and information about the complaint procedures. The university will periodically educate and train employees and supervisors regarding the policy and conduct that could constitute a violation of the policy.

The policy was established on April 26, 2016. Questions about the policy should be directed to the Office of Social Equity, Delaney Hall, Room B-17, phone: 724-357-3402.

The university's *Compliance Specialist and Title IX Coordinator* is:

Elise Glenn, Compliance Officer and Title IX Coordinator

Office of Social Equity, Delaney Hall, B17, 724-357-3402

eglenn@iup.edu

The university's *ADA/Section 504 Coordinator* is:

Elise Glenn, Assistant to the President for Social Equity Office

of Social Equity, Delaney Hall, B17, 724-357-3402

eglenn@iup.edu

Students Rights under the Family Educational Rights and Privacy Act (FERPA)

FERPA affords students certain rights with respect to their education records. They follow:

1. The right to inspect and review the student's education records within 45 days of the day the university receives a request for access. Students should submit to the registrar, college dean, department chair, or other appropriate official written requests that identify the records they wish to inspect. The university official will arrange for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the official to whom the request was submitted, that official will advise the student to whom to direct the request.
2. The right to request amendment of the student's education records that he/she believes are inaccurate or misleading. Students should submit such requests in writing to the appropriate university official. The written request must clearly identify the part of the record the student wants to be changed and must specify why it is inaccurate or misleading. If the university decides not to amend the record as requested, the student will be notified of the decision by a university official who will advise the student of his/her right to a hearing regarding the requested amendment. Additional information regarding hearing procedures will be provided to the student when he or she is notified of the right to a hearing.
3. The right to consent to disclosures of personally identifiable information in the student's education records, except to the extent that FERPA authorizes disclosure without consent. One exception that permits disclosure without consent is to school officials with legitimate educational interests. A school official is a person employed by the university in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person with whom the university has contracted (such as an attorney, auditor, or collection agent); a person serving on the Council of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his/her tasks. A school official has a legitimate educational interest if the official needs to review an education record to fulfill his/her professional responsibility. This includes school officials in other institutions to which a student is seeking admission or intends to enroll.
4. The right to file a complaint with the US Department of Education concerning alleged failures by IUP to comply with the requirements of FERPA. The name and address of the office that administers FERPA follows: Family Policy Compliance Office, US Department of Education, 400 Maryland Avenue, SW, Washington, DC 20202-4605.

Student Rights/Directory Information

The following information is considered directory information under the Family Educational Rights and Privacy Act and may be released without the student's permission: name, address, telephone number, dates and status of attendance (enrolled, part-time/full-time) and previous institutions attended, degrees conferred, major field of study and class, awards and honors, past and present participation in officially recognized sports and activities as well as physical factors of athletes (such as height and weight), and e-mail username.

Students may request that directory information not be publicly released by completing a nondisclosure request, available in the Office of the Registrar, Clark Hall. This will result in the student's directory information being removed from the "Find People" on-line directory on the IUP website. Upon receipt of this signed form in the Office of the Registrar, all information will be withheld, even beyond graduation, unless the student requests in writing that this nondisclosure request be rescinded.

Student Conduct Policies and Procedures

As a community, the university has developed a code of standards and expectations that are consistent with its purpose as an educational institution. The Student Conduct Policies and Procedures articulate these standards and can be found at www.iup.edu/studentconduct. The Office of Student Support and Community Standards supports the academic mission of the university by promoting the development of a campus community characterized by reasonable safety and security, responsible behavior, civility, and respect.

Through enforcement of university policies and regulations, the office challenges students to take responsibility for their action; demonstrate respect for themselves, property, and other individuals; and develop skills that will enhance lifelong problem solving, communication, and decision-making abilities. The Office of Student Support and Community Standards can be reached at 724-357-1264 and is located in Suite G-11 Ruddock Hall.

Sexual Discrimination/Misconduct Policy and Resources

The university is committed to providing a safe and positive living, learning, and work environment that is free from sexual discrimination and other prohibited sexual misconduct. Students, employees, and university affiliates are expected to conduct themselves in a manner that does not infringe upon the rights of others. The Sexual Discrimination/Misconduct Policy provides detailed definitions, reporting guidelines, and complaint resolution procedures. It can be found at <https://www.iup.edu/social-equity/policies/sexual-discrimination-and-sexual-misconduct/>. The policy is applicable to all students and employees of the university, as well as designated volunteers, contractors, and vendors. Sexual discrimination and misconduct include: sexual harassment, nonconsensual sexual contact, non-consensual sexual intercourse, sexual exploitation, and retaliation. Resources and support

services are available to the university community. Visit [Title IX Reporting](#) for more information. The Social Equity and Title IX Office can be reached at 724-357-3402, social-equity@iup.edu, title-ix@iup.edu, or in B-17 Delaney Hall.

Undergraduate Admissions Policy

Graduates of an accredited four-year high school or holders of a GED equivalency diploma are qualified to apply for admission to IUP. Students who have completed the junior year of high school may file an application any time after July 1.

Requests for applications should be addressed to

Office of Admissions
Indiana University of Pennsylvania
Sutton Hall, Suite 120
1011 South Drive
Indiana, PA 15705
724-357-2230

An online application for admission is available at www.iup.edu/admissions/undergraduate/applynow.

The Admissions Committee, giving equal opportunity to all students, will take the following criteria into consideration when reviewing each application: grades and courses taken, SAT or ACT scores, high school counselor recommendations, and other pertinent information that would be helpful to the Admissions Committee in making decisions. SAT or ACT scores are not required for transfer applicants, veterans, or applicants who have graduated from high school more than one year before applying. However, transcripts from high school and all colleges previously attended are required of all applicants.

Applicants are strongly urged to take the usual college preparatory program in high school. Applicants should also take any available high school courses in the field of their intended major. Certain majors at IUP require completion of a foreign language at the intermediate level to earn a bachelor's degree. The Admissions Committee does not require an applicant to take a foreign language in high school for admission to these majors; however, it is in the student's best interest to do so.

It is possible for some students with outstanding grades to receive an offer of admission based on their strong high school transcript before SAT or ACT scores are submitted. We still require SAT/ACT scores for scholarship consideration and strongly urge all students to submit them as soon as possible to fully complete their IUP application.

Applications are considered by the Admissions Committee on a rolling basis. Under a rolling admissions policy, applications are reviewed as they become complete. Decisions can range from automatic acceptance, to requests for additional information, to other alternatives, with a May 1 deadline for nonrefundable tuition deposits.

Academically qualified applicants to the departments of Art, Music, and Theater and Dance will be admitted to the university by the Admissions Committee. However, admission to the requested major will be subject to the acceptance by the Department of Art after a portfolio review and by the departments of Music, and Theater and Dance after an audition. Students will receive information from the Art, Music, and Theater and Dance departments concerning auditions and portfolio reviews once they have been accepted to IUP.

Program for Visiting High School Students (Dual Enrollment)

IUP permits the exceptional high school student to preview university life and earn regular college credit on a limited nondegree basis. Students should contact the Office of Admissions to inquire about the Dual Enrollment Program.

Freshman Applications

All people expecting to apply for freshman admission to IUP should plan to take the SAT or ACT test during their junior and/or early part of their senior year. The Admissions Committee recommends that students take the tests more than once. The committee considers the highest scores from all tests taken.

Arrangements to take the SAT or ACT tests can be made through the high school counselor, by writing to the College Entrance Examination Board, Box 592, Princeton, NJ 08540, or American College Testing, P.O. Box 168, Iowa City, IA, 52243, for an information pamphlet and a test registration form, or online at www.collegeboard.com.

In order for the test scores to be received by IUP, the applicant should designate IUP on the test registration form (SAT code 2652, ACT code 3704) as one of the universities to receive the scores, or the applicant can request that his or her school counselor forward test scores to the Admissions office.

Placement Test Policy

Entering students are required to complete placement tests before course registration. Based on their placement results, students may be required by departments to take one or more additional courses in preparation for their courses. These courses may be in addition to course prerequisites and the minimum requirements for the students' program of study. Students who have prepared as directed, taken testing seriously, and still believe their test scores do not accurately reflect their abilities should appeal their placement by contacting the Office of New Student Orientation.

Transfer Admissions

A student who has been attending another institution of higher education and wishes to transfer to IUP must submit an application, official transcripts of all postsecondary educational work, and an official high school transcript.

All admissions decisions are made on a rolling basis by the Admissions Committee. Under a rolling admissions policy, applications are reviewed as they become complete. Decisions can range from automatic acceptance, to requests for additional information, to other alternatives.

Transfer applications are reviewed on the basis of academic college course work attempted or completed. Transfers are required to have at least a cumulative 2.0 GPA on a 4.0 scale (C average) from all schools previously attended and to have met the minimum requirements established by the academic department to which the student is applying. Some majors require increased standards for admission and additional information. Contact the Office of Admissions for specifics. If a student has at least 12 college level (non-developmental and non-technical) credits, the decision will be based solely on their transfer GPA. If the student has less than 12 college credits, the admissions decision considers other evidence of students' performance and ability to be a successful college student.

The evaluation of credits from other institutions of higher education is the responsibility of the Office of Admissions and the application of the credits is at the discretion of the academic dean who has jurisdiction over the student's desired major. Normally, courses considered for transfer are only those taken from institutions that are accredited by the six regional accrediting agencies. Each course is evaluated separately. The evaluation includes a review of the description, credits, and grade of each course along with the applicability of the course to the student's major at IUP. However, only credits transfer, not grade point average. It has been the policy of the university that only courses with a grade of "C" or better will be accepted, except for two-year AA or AS degree graduates of state-supported community colleges in Pennsylvania. No matter how many credits are transferable, the student must satisfy all of the degree requirements falling into the categories of (1) university requirements, (2) college requirements, and (3) department requirements.

For a second Bachelor Degree students, a block of 90 credits is awarded if the first degree was earned from another university. Liberal Studies requirements, other than ones specifically required by the major, are considered met. All second degree students, whether they completed the first degree at IUP or another university, are required to complete a minimum of 30 credits to earn the second degree. The academic department determines which courses must be completed to earn the second degree.

University Requirements: All students are obligated to fulfill a basic program in Liberal Studies. The transfer evaluator will look at this area first for applicable credits for transfer. A vast majority of introductory courses are generally equivalent.

Statewide transfer degrees: Also known as "TAOC" degrees these are specific AA or AS transfer programs at Pennsylvania community colleges. Students with these degrees are guaranteed to transfer at junior standing in a parallel program at IUP. Please discuss with the Transfer Services office or reference the following IUP website www.iup.edu/admissions/undergraduate/apply-next-steps/transfer/college-guides-articulations-collaboratives/.

Second Baccalaureate Degree

A student with an earned baccalaureate degree who wishes to complete the requirements for a second or subsequent bachelor's degree must complete an undergraduate transfer application and submit official transcripts indicating degree(s) awarded. The student must complete a minimum of 30 additional IUP credits beyond those earned in his/her initial bachelor's degree and meet the requirements for graduation established by the academic department and college in which the new degree is to be earned. Students apply as undergraduate transfer students through the Office of Admissions.

IUP Residency Requirement for Awarding of Degrees

All students receiving their first baccalaureate degree are required to complete 30 of their last 60 credits in courses at IUP. All students receiving their first associate degree are required to complete 15 of their last 30 credits in courses at IUP.

For an IUP major, minor, or undergraduate certificate, students are required to complete at least 50 percent of required credits in courses at IUP or another State System institution. Junior/Senior year Study Abroad semesters or other formal Articulation agreements in which State System students may reverse-transfer credits back to IUP are exceptions to this policy.

For undergraduate active-duty service members, IUP applies a more military-friendly set of residency requirements, and these students should consult the Military and Veterans Resource Center for more information. IUP courses include all courses listed in the *Undergraduate Catalog* and *Graduate Catalog*.

Teacher Certification

A college graduate with an earned nonteaching baccalaureate degree who wishes to complete the requirements for Instructional Level I Certification must apply as a second bachelor's degree student. A minimum 3.0 cumulative GPA and successful PAPA scores are required for consideration for admission. Following admission to the program, applicants will be required to meet all requirements of the 3-Step Process for Teacher Education as they proceed. This document can be found in the College of Education and Communications section of this catalog or at the website www.iup.edu/education.

A Pennsylvania-certified teacher who wishes to add a new area of certification may apply to the Office of Extended Studies for admission as a postbaccalaureate student.

Act 101 Program

Students identified as eligible for Act 101 support may be admitted to the Act 101 Program through the Department of Developmental Studies in the College of Education and Communications. Please see detailed information in the Department of Developmental Studies description in the College of Education and Communications section of this catalog.

Immunization Requirements

Website: iup.edu/healthservice/

Students are required to complete a Student Health form documenting immunization status.

Reenrollment/Readmission Policy for Students Who Withdraw from the University Voluntarily

1. For Students in Academic Good Standing

- a. Previously matriculated undergraduate students who have registered for classes in at least one of the two previous regular academic semesters can re-enroll for courses by contacting their department for advising and an alternate PIN number.

- b. Undergraduate students who have withdrawn from the university voluntarily or who have not been enrolled in the previous two or more regular academic semesters must submit an online application for re-enrollment. Applications may be submitted up to one week prior to the start of the semester for which the student wishes to return. After processing the application, the student will be sent information regarding registration.

2. For Students Not in Academic Good Standing

Students not in academic good standing must submit an online application for re-enrollment consideration. Applications may be submitted up to two weeks prior to the start of the semester for which the student wishes to return. An Academic Standards Officer will review the application and make a decision on the student's eligibility to return. If approved, the student will be sent information regarding registration.

If the student is seeking admission to a new college, the Academic Standards Officer of the new college will consult the Academic Standards Officer of the former college before making a decision.

3. For Students Who Have Been Involuntarily Withdrawn from the University

Please see IUP's Involuntary Withdrawal Policy and its readmission process for information:
<https://www.iup.edu/supportingstudents/involuntary-withdrawal-policy/>.

4. Procedures

- a. To return to the university, log into MyIUP and select "Academics." You will find "Apply for Re-enrollment to IUP" in the "Academic Record" portlet. Complete and submit the form. If you don't have a MyIUP account, claim your account to get MyIUP access. (Note: If you last attended prior to fall 2000, complete a paper Application for Re-enrollment: www.iup.edu/registrar/forms.) For more information on IUP's re-enrollment/readmission procedures, please access the Registrar's website at: www.iup.edu/registrar/policies/readmission-procedures/
- b. Separate from the re-enrollment/readmission process, a returning student may be required to address outstanding holds of any kind before being allowed to register for classes.
- c. Some programs may have enrollment restrictions that affect re-entry. Check with the dean's office of the college housing the major.
- d. Applications for students seeking to change their major will be forwarded to the Academic Standards Officer of the college of the requested major. A change of major request will be initiated on the student's behalf. If approved, the Office of the Registrar will officially change the major while reactivating the student account for registration.
- e. Students who want to be considered for financial aid must complete the Free Application for Federal Student Aid (FAFSA) to determine their financial aid eligibility. Eligibility will be based on financial need, as determined by the FAFSA, and on prior academic record.
- f. Returning students who have not been enrolled for two years or more may petition their college dean for application of the Canceled Semester Policy, which provides for cancellation from the cumulative record of the effects of one semester below a GPA of 2.0. Students who have been separated from the university for two consecutive calendar years may petition their college dean to return under the Fresh Start Policy. Students must pay fees and attend classes before a designated semester will be cancelled or the Fresh Start Policy will take effect. Details regarding these policies can also be found in the University Policies section in the Undergraduate Catalog.

The Summer and Winter Sessions

The Summer and Winter Sessions at IUP are designed to meet the needs of many students. Courses, workshops, and seminars are offered in the liberal arts, teacher education, and other fields of study.

Continuing university students, including newly admitted freshmen, who wish to accelerate their program of studies will find both Liberal Studies and special courses in all fields of study. Students from other colleges and universities may take courses at IUP; however, they are advised to first ensure that their home institution will transfer such credits earned at IUP.

Teachers-in-service will find courses in the summer program to serve a variety of needs. They may enroll to qualify for permanent certification, satisfy Act 48 requirements, take refresher courses in their field of specialization, or take courses for the purpose of extending their certification to a new field.

The Summer Sessions schedule can be viewed at the website www.iup.edu/summer. The Winter Session schedule can be viewed at the website www.iup.edu/winter.

Attendance at Summer and Winter Sessions undergraduate courses is open to all students but does not constitute admission or readmission for continuing registration in the fall and/or spring semesters. IUP students with less than a 2.0 cumulative GPA must receive approval from their dean's office before attending Summer or Winter courses. Non-IUP students (graduate and undergraduate) can submit an electronic form that can be accessed at the website www.iup.edu/summer or www.iup.edu/winter. Students who desire readmission should apply to the Office of the Registrar at least one week before the start of the semester for which a student is applying.

There is a one-class limit for IUP students for Winter session unless permission is granted by the assistant/associate dean of the student's college.

Institutional Fees

*The university reserves the right to change its fees without notice. The fee schedule is subject to change; these figures are to be considered simply as an estimate. The most current fee schedule can be obtained by writing to the IUP Office of Admissions, by phoning 724-357-2230, or by visiting the website www.iup.edu/bursar.

Tuition

Tuition covers the keeping of student records, use of the library, student welfare, and laboratory facilities. The most current fee schedule for in-state and out-of-state students can be obtained by visiting the website www.iup.edu/bursar.

An in-state student is one who has been domiciled in Pennsylvania for at least one year preceding attendance at any institution of higher education in the state of Pennsylvania. A minor is presumed to have the domicile of his/her parents or legal guardian. Students who have any questions concerning their domicile should read the official text of the rules, as published in Volume 22, Pennsylvania Code, Section 507.1 through 507.11.

Dining Plan Fee

Current dining plans and rates can be found at: www.iup.edu/housing. Residential students are required to have a dining plan and can select from six plans. Meals provided through these plans are for the use of the contract holder only. Flex money can be carried from fall to spring semester; however, any portion not used by the end of the spring semester **will be forfeited**. Flex may be used for guests.

Wellness Fees

All students enrolled on the Indiana campus pay a Wellness Fee. Students enrolled on other campuses are not assessed this fee. The services of the Center for Health and Well-Being are supported by student wellness fees. These services include the Health Service; Counseling Center; Alcohol, Tobacco, and Other Drugs; Fitness and Recreation; Health AWAREness; Haven Project; Nutrition Connection programs; Disability Services; and Athletics.

The Wellness Fee will be based upon the number of credits taken. Students will be charged \$20.00 per credit, with a cap of 15 credits. Students from other campuses may choose to pay this fee and receive care on the main campus.

Additional charges may be necessary depending on the service provided. The Wellness Fee may be reduced or waived in certain circumstances. By reducing or waiving the fee, students are no longer able to access all services at the Center for Health and Well-Being. For detailed information about available services or fee waivers, visit www.iup.edu/chwb.

Instructional Fee

All students are charged an instructional fee to support academic equipment, library resources, maintenance and repair projects, recreational facilities, and the advancement of technologies. The fee is \$34.20 per credit for resident students with a max of \$410.40. The fee is \$83.40 per credit for nonresident students with a max of \$1,000.80.

Registration Fee

All students are charged a registration fee of \$32 per semester.

Miscellaneous Costs

In some courses, students are required to obtain supplies and materials to complete course projects. In many courses, a student may make a voluntary contribution to a cooperative fund established for the purpose of obtaining these supplies and/or services at a lower cost. Examples are art courses, field trips, etc.

Other Costs

In addition to the listed fees, the average student will require \$500-\$1,200 per semester for books, gymnastic costume, student organization dues, personal expenses, etc. These charges are not direct university charges.

Residence Hall Fee

Current housing rates can be found at www.iup.edu/housing. Resident students are required to have a dining plan and can select from six plans (see Dining Plan Fee).

Student Activity Fee

This fee is collected from all students and administered through the Student Cooperative Association under regulations approved by the Council of Trustees. This fee covers the cost of student activities in recreation, athletics, lectures, entertainment, student organizations, student publications, etc. and is payable in one lump sum for the semester. The Student Activity Fee is assessed each semester on a per-credit basis as follows: \$35 per credit for all students, capped at 15 credits (\$525) for undergraduate students and 12 credits (\$420) for graduate students. This fee is assessed only to students attending the Indiana and Punxsutawney campuses.

Student Service Fee

This fee will be used to support programming and services that support out-of-classroom experiences for both undergraduate and graduate students. Undergraduate students will be assessed \$17 per credit cap at (\$255.00) and graduate students, \$14 per credit.

Transportation Fee

This fee of \$18 is assessed to students to address issues related to parking and to improve the transportation system available to students, including increased bus service.

Technology Tuition Fee

This fee is assessed for the purpose of acquiring, installing, and maintaining up-to-date and emerging technologies to enhance student learning outcomes. The fee will be assessed to all students per semester as follows:

Pennsylvania residents: \$20 to a maximum of \$252

Nonresident students: \$30 to a maximum of \$372

Summer Sessions Fees

Basic Tuition Fee

The most current fee schedule can be obtained by writing to the IUP Office of Admissions, by phoning 724-357-2230, or by visiting the website www.iup.edu/bursar.

Summer Dining Plan Fees

Current summer dining fees can be found at www.iup.edu/housing. Students are charged for each session according to the number of weeks they require housing. Resident students can select from two dining plans, 19 meals per week or 14 meals per week.

Summer Instructional Fee

All students are charged an instructional fee to support academic equipment, library resources, maintenance and repair projects, recreational facilities, and the advancement of technologies. This fee is \$34.20 per credit for in-state students and \$83.50 per credit for out-of-state students.

Summer Registration Fee

All students are charged a registration fee of \$32 for the summer.

Summer Residence Hall Fee

Current summer housing fees can be found at www.iup.edu/housing. Students are charged for each session according to the number of weeks they require housing. Resident students can select from two dining plans, 19 meals per week or 14 meals per week.

Summer Student Activity Fee

This fee in the summer is \$42 per credit for undergraduate students.

Summer Student Services Fee

This fee in the summer is \$17 per credit for undergraduate students.

Summer Student Wellness Fee

There is no mandatory wellness fee in the summer. All summer student health fees are optional. For further information, contact the Center for Health and Well-Being at 724-357-9355.

Summer Technology Tuition Fee

This fee is assessed to all students per summer session as follows:

In-state: \$20/credit

Out-of-state: \$30/credit

Winter Session and Distance Education Only Fees

Basic Tuition Fee

The most current fee schedule can be obtained by writing to the IUP Office of Admissions, by phoning 724-357-2230, or by visiting the website www.iup.edu/bursar.

Winter Session and Distance Education Only Instructional Fee

All students are charged an instructional fee to support academic equipment, library resources, maintenance and repair projects, recreational facilities, and the advancement of technologies. This fee is \$34.20 per credit for in-state students and \$83.40 per credit for out-of-state students.

Winter Session and Distance Education Only Registration Fee

All students are charged a registration fee of \$32 for the winter session or distance education-only.

Winter Session and Distance Education Only Student Services Fee

This fee in the winter session or distance education-only is \$17 per credit for undergraduate students.

Winter Session and Distance Education Only Technology Tuition Fee

This fee is assessed to all students per winter session or distance education only as follows:

In-state: \$20/credit

Out-of-state: \$30/credit

Special Fees

Additional Course Fees

Additional fees may be attached to some courses; standard tuition fees are also charged. Courses currently carrying additional fees follow.

- **Applied Music Fee:** \$100 per credit—Students enrolled in applied music (APMU) courses will be assessed this fee.

Application Fee

A nonrefundable \$25 application fee must accompany the application for admission to the university.

Advance Deposit Fee

An advance deposit-tuition fee of \$150 is required of all incoming freshmen to reserve a space in the freshman class and a dormitory room if applicable (fall semester only). These deposits are nonrefundable.

Audit Fee

Full instructional fees are assessed for each course audited, with the exception that people on Social Security or equivalent retirement benefits are given remission of basic fees for such classes where space is available.

Bad Check Charge

A fee of up to \$34 for handling charges will be assessed for each check or draft not honored by the bank upon which the check or draft was drawn for any reason, except in the event of a verifiable bank error.

Clinical Laboratory Registration Fee

A registration fee of \$32 will be paid to IUP. This fee is for students enrolled at IUP but attending classes at a designated clinical facility. Tuition, room, and board charged for these students are to be paid by the student directly to the hospital or institution.

Damage Fee

Students are responsible for damage, breakage, loss, or delayed return of university property.

Disney International Program Fee

International students participating in the five- to seven-month Disney Reciprocal Exchange Program through the Office of International Education are assessed a fee of \$2,000.

Evacuation and Repatriation Fee

All registered international students will be charged this fee of \$40 per fall semester, \$55 for spring, and \$25 for summer.

Examination for Credit Fee

A fee of \$40 will be assessed for each examination taken for credit.

I-Card Production Fee

A nonrefundable \$15 fee is charged to all incoming students for production of their I-Card. There is also a \$15 I-Card replacement fee for all replacement I-Cards.

Immigration Fee

All registered international students will be charged a nonrefundable immigration fee of \$75 per semester.

Installment Payment Fee

A nonrefundable fee per semester is charged to students participating in the monthly installment payment plan. \$50 for 4 payments, \$45 for 3 payments, and \$40 for 2 payments.

International Student Orientation Fee

This fee of \$125 is charged to all international students who register for the IUP orientation program to support associated costs.

International Student Placement Testing Fee

This fee of \$45 is charged to all international students who test.

Student Conduct Fines and Fees for Service

Based on student conduct sanctions, the following fees will be assessed:

BASICS-Alcohol/Marijuana	\$35
Alcohol/Chemical Health Assessment	\$45
Disciplinary Probation	\$100
Stayed Removal from residential building	\$150
Removal from halls	\$150
Ban from halls	\$150
Stayed Suspension	\$200
Suspension (must be paid to re-enroll)	\$300
Failure to Appear-administrative hearing	\$100
Failure to Appear-Conduct Board hearing	\$200

Late Payment Fee

A fee of \$30 will be assessed on each monthly payment received five days after the due date, with a maximum of \$120 per semester.

National Student Exchange Program Fee

A one-time \$300 nonrefundable fee is charged to IUP students participating in the National Student Exchange Program. Students attending IUP under the National Student Exchange Program will be charged the Pennsylvania resident basic fee and have the application fee waived.

Off-Campus Instructional Fee

A fee of 10 percent of the undergraduate in-state tuition rate will be charged to students taking courses at an off-campus site and/or using distance education technology to cover operating costs for services and instructional support at off-campus sites.

Portfolio Application/Assessment Fee

A nonrefundable \$15 fee will be charged to a student for each portfolio application per course. Before the assessment, a nonrefundable fee of one-half the current tuition per credit is required.

Teacher Certification Fee

A fee of \$60 payable to the Commonwealth of Pennsylvania is charged to cover the administrative and recording costs for the issuance of a teaching certificate by the Department of Education. A \$35 fee is charged for students applying for out-of-state certification.

Testing Fee

All entering freshmen must participate in orientation and placement testing during the summer immediately preceding the student's matriculation on campus. Fees (assessed by type of admit) of \$155 for the one-day testing program and \$255 for the two-day program are charged. The placement retesting fee is \$30. Please see the catalog section Academic Success Center (ASC@IUP) on New Student Orientation for further information about the orientation programs for new freshman and transfer students.

Transcript Fees

Printed and electronic transcripts ordered online cost \$10/copy and are processed the same business day. All details and complete instructions are found on the Office of the Registrar's website, www.iup.edu/registrar.

Transcripts will be withheld by IUP if a student has an outstanding financial account with the university. Payment of the bill or establishment of a payment plan satisfactory to the university will be required for release of transcripts.

Billing and Payments

All bills are available online through IUP EasyPay, which can be accessed through MyIUP. Students may choose from two different payment plans; otherwise, it is recommended that payment be made in full. Payment by American Express, MasterCard, Discover, VISA, and ACH e-checks is available online. Payment can also be made by mail to the Office of the Bursar.

Financial Delinquency Policy

Registration is not complete until a student pays the fee for registration, and the university reserves for itself the right to bar a nonpaying student from classes. When it has been determined during the course of a semester that a student's account has become delinquent from accrued charges, the Office of the Registrar will be notified of this delinquency and advised to refrain from allowing the student to make further registration transactions, from reporting the student's grades, and from issuing any transcripts for that student's work until the delinquent account has been satisfied. Faculty members will submit a grade for the financially delinquent student; however, requests from the student will not be honored, and official reports will be released by the Office of the Registrar only after the student has cleared his or her account or has established a payment plan satisfactory to the Office of the Bursar.

Delinquent Accounts

Students are not permitted to enroll for any semester, receive transcripts, or graduate until all account balances have been paid in full. Also, credit will not be certified to any other institution until all overdue accounts have been paid. A late payment fee of \$30 will be assessed each month on accounts that are not paid within five days of the due date with a maximum of \$120 per semester. The same regulations will also be applied to inter-semester payments.

Undergraduate students desiring to leave school before the close of a semester must report to the Department for Disability Access and Advising and to the Office of the Bursar to settle all unpaid accounts.

Payment of Financial Aid

Financial aid programs that can be deducted from a student's university bill include Federal Direct Loan, Federal Direct PLUS Loan, Federal Perkins Loan, Federal Pell Grant, Federal Supplemental Educational Opportunity Grant, Pennsylvania State Grant, and IUP scholarships.

Federal Work Study earnings are paid directly to the student every other week and thus are not used for billing purposes. All other financial aid is paid directly to the student's account. If a credit balance exists after satisfying all IUP charges, excess funds will be refunded to the student for other educational expenses.

IUP Refund Policy

For a copy of IUP's Refund Policy or a sample refund calculation, please contact the Office of the Bursar at 724-357-2207. The Refund Policy is also available at www.iup.edu/bursar.

Financial Aid

The Financial Aid office, located in Clark Hall, offers financial information and counseling to all students attending IUP. The types of financial assistance offered by the Financial Aid office include student employment, educational loans, scholarships, and grants. Counseling on debt management and loan repayment options is also available.

Eligibility Requirements

The general requirements for financial aid eligibility include the following:

1. Be enrolled on at least a half-time basis (6 credits per semester) except for the Federal Pell Grant program and Federal Work Study program.
2. Be a US citizen, national or permanent resident, or other eligible noncitizen.
3. Maintain satisfactory academic progress in your course of study.
4. Be enrolled or accepted for enrollment in an associate degree, bachelor's degree, postbaccalaureate teacher's certification, postbaccalaureate second undergraduate degree program, or eligible certificate program.
5. Not be in default and not have failed to make satisfactory arrangements to repay any federal student loans.
6. Not owe a repayment on a Federal Pell Grant or Federal Supplemental Educational Opportunity Grant.
7. Resolve unusual enrollment history (if required).
8. Not have borrowed in excess of any federal loan limits.
9. Be registered with the Selective Service Administration, if required.
10. Have a valid Social Security number.

Students must submit a *Free Application for Federal Student Aid* (FAFSA) as soon as possible after October 1st to receive maximum consideration for need-based financial aid administered through the university. The Title IV school code for IUP is 003277. Additional forms or applications may be required, depending on which student aid programs are being sought. Financial aid is available for both the regular academic year and the summer sessions. Separate applications for summer aid must be submitted by the student/parent for some aid programs.

Student Responsibilities-Students who apply for financial aid have certain responsibilities, which are listed below:

1. Accurately complete and submit the appropriate applications/forms by the published deadline dates.
2. Submit requested materials, corrections, or new information on a timely basis.
3. Meet the regulations and repayment schedules of student loans.
4. Inform the Financial Aid office of any grants, scholarships, or loans received from outside organizations.
5. Inform the Financial Aid office of any information that has changed since applying for aid.
6. Understand the satisfactory academic progress requirements for maintaining financial aid eligibility.
7. Use financial aid funds for educational purposes only.

Financial Aid Programs Available

Financial assistance is available in the form of grants and scholarships, student employment, and educational loans. Each of these funding sources has unique characteristics explained in more detail below.

Employment

The Student Employment Program is available to assist students in finding job opportunities on or off campus. Students may gain access to a listing of available positions by accessing the online job listing at www.iup.edu/studentemployment.

The Student Employment Program assists students in finding part-time employment. During the spring semester, a Spring Career Fair is conducted, providing IUP students the opportunity to meet with representatives from a variety of organizations (i.e., camps, amusement parks, resorts, recreation areas, and restaurants). Representatives from local and out-of-state organizations attend the fair. Students may view a listing of seasonal job opportunities by visiting the website www.iup.edu/studentemployment. Students can use MyIUP to review their eligibility for the Federal Work-Study program by following the steps in the Finances Section of the portal. They will see a message regarding their eligibility for this need-based program. If they are eligible for FWS funding, they can choose to forward a request to have the award added to their financial aid program directly to Financial Aid.

Students may be employed on campus for up to 25 hours per week when classes are in session and up to 40 hours per week during breaks, including summer.* When classes are in session, most students work an average of 10 to 12 hours per week. Students are paid every two weeks for the hours they have worked. Generally, undergraduate students are paid at the minimum wage rate.

All students are eligible to work on campus.* There are two basic types of funding sources: (1) Federal Work Study Program (FWSP) and (2) University Employment (UE). Eligibility for FWSP is based on demonstrated financial need as determined from the *Free Application for Federal Student Aid* (FAFSA), which must be completed every year. Inquiries about eligibility for FWSP should be directed to the Financial Aid office. Students who do not demonstrate financial need may seek UE opportunities. No financial aid application is required.

An FWSP award may affect eligibility for student loans. For more specific information on how an FWSP award could impact loan eligibility, students should inquire at the Financial Aid counter in the lobby of Clark Hall or by e-mail at financial-aid@iup.edu.

Off-campus employment opportunities vary by organization, as do the hourly wages and hours worked per week.

*International students' circumstances may vary. For more information, please consult Student Payroll Services (724-357-2510, G-8 Sutton Hall).

Service-Learning Work Study Program-This employment program places FWSP-eligible students in community service positions available off campus. In addition to earning money, students gain practical work experience related to their academic major. The Service-Learning Center, which assists students in obtaining these opportunities, is part of the Career and Professional Development Center, located in 302 Pratt Hall.

PHEAA State Work Study-This employment program provides Pennsylvania students with employment opportunities in high technology and community service fields. Students can gain career-related, on-the-job work experience. Applications are available through the PHEAA website at www.pheaa.org and must be completed by both the student and the organization with which the student would like to be employed.

Important Disclaimer: The IUP Career and Professional Development Center serves only as a clearinghouse of information regarding job and internship opportunities. The listing of a position should not be interpreted as an endorsement. Students and alumni should personally research openings and agencies prior to entering into any contractual agreements. Accordingly, IUP expressly disclaims any liability in connection with potential or actual employment which results from any applicant's response to any job posted on the website.

Educational Loans

Loan programs offer repayable assistance to students who apply and qualify for them. Repayment terms, interest rates, and borrowing limits vary from program to program. Educational loans are a serious and important obligation. Receipt of funds means that the student assumes the legal responsibility for repayment of the loan at a future date. The promissory note for the loan specifies the terms and conditions under which the student is borrowing and the repayment provisions that are in effect. Participation in community service positions after leaving school may provide for repayment of certain student loans.

Federal Direct Subsidized and Unsubsidized Loan-The application for the Federal Direct Loan is the *Free Application for Federal Student Aid* (FAFSA). First-time borrowers will also need to complete a Federal Direct Loan Master Promissory Note (MPN) and entrance counseling to finalize the approval process. Both the MPN and entrance counseling can be completed at <https://studentaid.gov>.

Through this program, freshmen may borrow up to \$5,500 per academic year, sophomores may borrow up to \$6,500 per academic year, and juniors and seniors may borrow up to \$7,500 per academic year. An academic year at IUP is defined as the fall, spring, and summer. Subsidized Federal Direct Loans are awarded on the basis of financial need as determined by the FAFSA and require no payment of principal or interest until six months after the student ceases half-time enrollment (6 credits per semester). Unsubsidized Federal Direct Loans require payment or capitalization of interest only during periods of enrollment and the six-month grace period. Following the grace period, both types of Federal Direct Loans are repayable to the US Department of Education, which can also provide current interest rate information.

Additional Unsubsidized Federal Direct Loan funds are available to independent undergraduate students. Freshmen and sophomores may receive up to \$4,000; juniors and seniors may receive up to \$5,000. Dependent students whose parents cannot obtain a Federal Direct PLUS Loan may also be eligible for these additional unsubsidized funds. As of July 1, 2013, a first-time Federal Direct Student Loan borrower is no longer eligible for the subsidized direct loan if he or she exceeds 150 percent of the program's published length. In addition, a borrower exceeding the 150 percent of the program length will lose the interest subsidy on his or her subsidized direct loans.

Federal Direct PLUS Loan-Parents interested in obtaining the Federal Direct PLUS Loan must establish their eligibility for the loan through a preapproval process at <https://studentaid.gov>. Parents may borrow for their dependent children up to the cost of education minus other financial aid. The loans are repaid starting 60 days after the final disbursement for the loan period is issued, however, in-school deferment provisions are available. The US Department of Education can provide current interest rate and deferment information.

Alternative Loans-A wide variety of privately financed educational loan programs are available. Each of these programs offers unique terms and conditions that affect its availability in particular circumstances. Check the ElmSelect web page at www.elmselect.com for a list of those alternative loans borrowed by IUP students in the last five years, if the lender is still participating.

Grants

Grants are funds that carry no obligation for repayment. These funds are awarded to the student on the basis of financial need.

Federal Pell Grant-The Federal Pell Grant program provides funds to eligible undergraduate students who have not earned a first bachelor's degree or who have not used their lifetime limit. A *Free Application for Federal Student Aid* (FAFSA) must be filed annually to apply for this grant. Awards are based on the number of credits for which a student is enrolled on the 15th day of the term for the Fall and Spring. Students may be eligible for a Pell Grant for fall/spring and summer. A maximum of 12 full-time semesters (or its equivalent) of eligibility is permitted.

Federal Supplemental Educational Opportunity Grant (FSEOG)-Federal Pell Grant-eligible students are considered for FSEOG. Grants are awarded based on a combination of financial need and the receipt date of the annual FAFSA application. Students who receive FSEOG must be enrolled for at least 6 credits each semester.

Pennsylvania State Grant (PHEAA Grant)-PHEAA Grants are available to eligible part-time and full-time undergraduate students who are Pennsylvania state residents. You must complete a *Free Application for Federal Student Aid* (FAFSA) by May 1 to be considered. First-time applicants are also required to complete a PHEAA information form. Academic progress guidelines require that a student earn 12 new non-remedial credits (or its equivalent for part-time students) for each full-time semester for continued eligibility of grant funds. A maximum of 8 full-time or 16 part-time semesters of eligibility is permitted. During summer sessions, students must be enrolled for a minimum of five weeks.

State Grants-Some state educational agencies offer grant assistance to students who study outside of their state of residency. Out-of-state students are encouraged to investigate opportunities for grant funding from their home state.

Scholarships

IUP Scholarships-Departments, colleges, and the University Scholarship Committee administer various scholarship programs that have been established by alumni and friends of the university. These scholarships provide gift assistance to academically talented students and assist them in financing their educational expenses. In addition to the admission application, a general scholarship application is available at <https://iup.scholarships.ngwebsolutions.com>. Incoming freshmen will have their eligibility for merit-based scholarships determined at the time of admissions application. Eligibility for need-based scholarships and grants will be determined automatically during financial aid award processing. See the website www.iup.edu/scholarships for further information, including contacts for each scholarship. General questions may be directed to the

scholarship coordinator in the Financial Aid office, 200 Clark Hall, 1090 South Drive, Indiana, PA 15705; telephone: 724-357-2218; e-mail: financial-aid@iup.edu.

PASSHE Foundation Scholarships-Students who attend a Pennsylvania State System of Higher Education University (PASSHE) can apply for scholarships from the PASSHE Foundation. These scholarships have been established to assist both undergraduate- and graduate-level students. For more information and applications, students should visit www.thepafoundation.org.

PHEAA-Administered Scholarships and Special Programs-Pennsylvania residents have financial aid available in the form of grants, scholarships, special programs, work-study opportunities, or loan forgiveness. Different types of aid are available for both undergraduate and graduate study. To apply for any of these programs, students will need to complete and submit the *Free Application for Federal Student Aid* (FAFSA). Some of these programs have submission deadlines that differ from federal programs. For complete information, Pennsylvania students can visit www.pheaa.org/.

Private Scholarships-Various service clubs, organizations, churches, schools, and industries offer scholarships to students. High school guidance offices, libraries, and hometown newspapers are often excellent sources for information concerning private scholarships. The Financial Aid office website provides a listing of various scholarship websites that will enable students to conduct searches on their own and to apply for these scholarships online. For complete information, students can visit www.iup.edu/scholarships.

ROTC Scholarships-The Reserve Officers' Training Corps (ROTC) offers many different types of scholarships. High school students can apply for the ROTC four-year or three-year Advanced Designee scholarships before attending college. College students can apply for a 3.5-year, 3-year, 2.5-year, or 2-year scholarship. ROTC scholarships pay for tuition and fees, a book allowance, and a monthly stipend (while school is in session). Scholarships are competitive and depend on the students' academic major. Interested and eligible high school students may apply online at www.goarmy.com/rotc. College students may obtain additional information and eligibility criteria by contacting the ROTC staff members in Pierce Hall at IUP or by calling 800-IUP-ROTC.

Other Resources

Athletic Grants-in-Aid-IUP is an NCAA Division II institution. Athletic Grants-in-Aid awards are available in accordance with NCAA rules and regulations at the discretion of the respective head coach. Please see www.iupathletics.com for more information regarding sports that are offered.

Community Assistants-Upperclass students and freshmen at the end of their first year may apply to become community assistants at IUP. Students earn a room and board waiver, as well as a small stipend, by working as community assistants in IUP residence halls. Application timetables and deadlines are advertised in the *Penn* and posted in the residence halls and other locations around campus, including the Office of Housing, Residential Living, and Dining website. Community assistants are selected on the basis of leadership, interpersonal skills, and willingness and ability to serve as role models. Community assistants must have and maintain a 2.5 GPA. For further information, please contact the Office of Housing, Residential Living, and Dining, G37 Ruddock Hall, 1099 Maple Street, IUP, Indiana, PA 15705, 724-357-2696.

Office of Vocational Rehabilitation Assistance (OVR)-Students who have physical or learning disabilities may receive educational benefits through the OVR. To be eligible, students must satisfy the physical and financial requirements of the agency. For further information, students should contact their county offices of vocational rehabilitation.

Pennsylvania National Guard Educational Assistance Program (EAP)-Together with the Pennsylvania Department of Military and Veterans Affairs, PHEAA administers this tuition assistance program for students who enter into a service commitment with the Pennsylvania National Guard for a period of six years. Eligible students who join the Pennsylvania Army/Air National Guard may be eligible for a state EAP grant up to the amount of the PASSHE full-time tuition rate. This award may be reduced for students who also are receiving Federal Tuition Assistance benefits and/or benefits from Chapter 33 of the GI Bill. Currently eligible students may receive ten semesters of EAP. To apply for EPA and/or receive the most current information regarding this benefit, the military member should contact the readiness noncommissioned officer at his/her unit. Additional information may also be obtained by calling 717-861-8626 or 800-GO-GUARD.

University Refund Advance

The Financial Aid office, in conjunction with the Student Cooperative Association, administers the University Refund Advance on behalf of IUP students. Funds are available only to students who are expecting a financial aid refund that is yet to be disbursed. The maximum award is \$500, with repayment to be made in 60 days. No interest will be charged for these advances. Awards will be made to meet educational expenses only. See the Financial Aid office for the University Refund Advance application and additional information.

The University Refund Advance encompasses the following individual loan accounts:

- Jennie E. Ackerman Loan Fund
- Robert Bellis Loan Fund
- Mary Edna Flegal Loan Fund
- Colette Cromer Gershman Loan Fund
- Margaret Flegal Harte Loan Fund
- Suzanne Marshall Hartman Loan Fund
- John Hays Memorial Fund
- Oliver W. Helmrich Memorial Loan Fund
- William Henzelmann Memorial Fund
- Mary Anne Kolessar Loan Fund
- Jane E. Leonard Memorial Loan Fund
- Mack Loan Fund
- Rusty Preisenderfer Memorial Loan Fund
- Flossie Wagner Sanford Student Loan Fund
- Varsity I Loan Fund
- Norah Zink Loan Fund

Military and Veterans Resource Center (MVRC)

Visit [Military and Veterans Resource Center](#) for more information.

Title IV Satisfactory Academic Progress Policy

"In order to receive Student Financial Aid under the programs authorized by Title IV of the Higher Education Act, as amended, a student must be maintaining satisfactory academic progress in the course of study that he/she is pursuing." (Federal Register/Volume 48, No. 195/Thursday, October 6, 1983.) Students must be in compliance with both the university's Academic Standards Policy and the Financial Aid Sufficient Progress Policy (SAP) to demonstrate satisfactory progress.

These Title IV programs include Federal Pell Grant, Federal Work Study Program, Federal Supplemental Educational Opportunity Grant (FSEOG), Federal Direct Loans, and Federal Parent PLUS Loan.

A student who meets the university's Academic Standards Policy, but who does not meet the Financial Aid SAP qualitative and quantitative standards, may continue in university registration, but will not be eligible to participate in the Federal Title IV aid programs. This happens because the Financial Aid SAP Policy is stricter than the university's Academic Standards Policy

A full statement of requirements for Satisfactory Academic Progress for Title IV Federal Student Aid is available at the Financial Aid office.

Title IV Financial Aid Satisfactory Academic Progress Policy

The Financial Aid Sufficient Progress Policy applies to undergraduate and graduate students enrolled in the university.

- Financial Aid Satisfactory Academic Progress (SAP):** To be considered in good financial aid SAP standing, undergraduate students must maintain a 2.0 CGPA, must successfully complete (pass) at least 67 percent of the cumulative number of their registered credits at IUP, and must complete their degree requirements within an established time frame of no longer than 150 percent of the published length of the program.

Students' SAP is measured for each academic year at the end of the spring semester (corresponding with the end of the spring payment period), after grade processing has been completed. This measurement determines if students have met the required CGPA, have passed a sufficient percentage of credits, and time frame completion in order to be eligible for Title IV funding in future terms.

Students are notified of their financial aid suspension status via USPS direct mail when a completed Free Application for Federal Student Aid (FAFSA) for the upcoming academic year is on file in the Financial Aid office. Students are also able to review their SAP status on their

MyIUP account.

b. **Financial Aid Suspension:** When students who do not meet CGPA and have not successfully passed the sufficient number of credits, all Title IV aid for that student will be suspended beginning with the next semester of attendance.

A student who is in this financial aid suspension status, however, will be reviewed at the end of the next semester of attendance (payment period) to evaluate if the percent of progress and CGPA are met. If the percent of progress and CPGA are achieved, then the student's Title IV financial aid suspension will be rescinded beginning with the next semester of enrollment.

c. **Time Frame for Degree Completion:** In addition to meeting the 67 percent of progress and CGPA requirements, students must complete their degree requirements within an established time frame of no longer than 150 percent of the published length of the program. Since enrollment status may vary from term to term, the maximum period for degree completion is measured in terms of credits attempted at IUP plus any transfer credits. Part-time and full-time students are treated equally under this policy. For example, undergraduates should complete the requirements for a bachelor's degree at the point of having 180 attempted credits at IUP (150 percent of the published length of the program).

d. **Appeal Process:** Students who have special circumstances, beyond their control (such as medical emergencies or death of a family member), which cause them to not make SAP, may submit a written appeal to the Financial Aid Appeals Committee for consideration of reinstatement of Title IV aid eligibility. However, a special circumstance does not guarantee an exception to the financial aid SAP regulations. Students who exceed the 150 percent credit guidelines due to change of major or double majors may also submit a written appeal.

The written appeal must specifically outline the reason(s) for the progress deficiency *and* identify what has changed to allow the student to make SAP by the next evaluation. The appeal must contain sufficient documentation to substantiate the reason cited for lack of progress for instance, supporting documentation from a healthcare provider that clarifies the student's health situation, an obituary, and/or letters of support from relevant professional individuals (not related to the student) are all acceptable forms of documentation. Letters from third party individuals must be on letterhead and contain a hand-written signature. Electronic signatures are not accepted

For students who do not appeal or who are denied an appeal for a semester, an appeal for reinstatement of Title IV aid for a subsequent semester will be accepted for review.

After reviewing the written appeal of a student in financial aid suspension, the Financial Aid Appeals Committee may decide to reinstate Title IV financial aid eligibility for specific periods of the next financial aid award year.

e. **Reinstatement of Title IV Aid Eligibility:** In order for students to reestablish eligibility to receive Title IV financial aid, one of the following must occur:

1. Students must meet the minimum requirements for SAP (at least 67 percent cumulative percent of progress, meet the CGPA requirement (2.0 UG or 3.0 GR), and the time frame for degree completion).

OR

2. The Financial Aid Appeals Committee must approve the student's written appeal (based on documented circumstances).

f. **Treatment of Transfer Credits, Audits, Incompletes, and Other Grades:**

1. **Transfer Credits:** All transfer credits that students transfer into IUP are taken into consideration as part of their attempted and passed credits for purposes of measuring SAP percent of progress as well as time frame for degree completion. Non-accepted transfer credits will not count towards measuring pace nor timeframe for degree completion.
2. **Audits, "S," and "U" Grades:** Because course audits, "S," and "U" grades carry no credits, they are not reviewed or counted for SAP progress purposes.
3. **Incompletes:** Designations of "I," "L," "R," and "*" are treated as credits attempted/zero credits passed, thus have no effect on CGPA. However, these designations are treated as non-completed (attempted) credits and have an impact in the calculation of the percent of progress measure and time frame for degree completion. (Note: The "*" is an administrative symbol indicating that a grade was not submitted at the time of grade processing.)
4. **"F" Repeat with Replacement:** An "F" repeat with replacement is treated as credits attempted/credits passed/with the quality points (QP) of the new grade replacing the 0.00 QP of the original "F" grade. An "F" repeat has a positive effect on the CGPA, but represents an additional number of credits attempted in regard to the percent of progress and time frame for degree completion measurements.

5. **"D" Repeat with Replacement:** Repeated classes that are "D" replacements to a student's record are treated as credits attempted/zero credits passed/with the quality points (QP) of the new grade replacing the 1.00 QP of the "D" grade. A "D" repeat with replacement may improve a student's CGPA but represents an additional number of credits attempted in regard to the percent of progress and time frame for degree completion measurements.
6. **Repeats with Averaging:** Courses that are repeated with averaging count as credits attempted/credits passed with the quality points for the class averaged into the CGPA. The maximum time frame for degree completion may be impacted by repeat with averaging classes.
7. **Withdrawals:** Designations of "W," "Q," "WP," or "WF" are treated as registered credits/zero credits passed/no effect on CGPA. Any type of "W" designation is treated as noncompleted (attempted) credits in the calculation of percent of progress and time frame for degree completion measurements.
8. **"N" Grades:** An "N" grade represents a non-participation failing grade. This counts as credits attempted/zero passed and zero QP will be averaged into determine GPA. This grade is treated the same as an "F" grade.
9. **Pass/Fail Grades:** Pass grades are treated as registered credits/credits passed/no effect on GPA. Fail grades are treated as registered credits/zero credits passed/with zero QP averaged into the calculation of GPA.
10. **Noncredit Courses:** Noncredit classes, such as those with Continuing Education Units (CEUs), are not used in measuring sufficient progress, since these classes cannot be applied toward degree requirements and no financial aid may be received for enrollment.
11. **Institutional Credits:** Institutional credits are counted as registered credits/credits completed. The QP for the course is not averaged into the student's overall GPA.
12. **Fresh Start Program/Canceled Semester:** Students readmitted under the Fresh Start Program, or who have had a canceled semester, must still meet the financial aid qualitative and quantitative SAP requirements (using all previously enrolled semester data). Federal regulations do not permit the financial aid office staff to remove or ignore any academic statistics.

Unofficial Withdrawal

Federal Title IV student aid recipients who earn a 0.00 GPA at the end of a semester in which they receive federal student aid will be reviewed to determine whether they actually completed the semester. Faculty members will be required to provide information to the Financial Aid office regarding the students' last date of academically related activity. Based on that date, federal student aid may need to be adjusted.

Military and Veterans Resource Center

E-Mail: iup-mrc@iup.edu; **Telephone:** 724-357-3008

The Military and Veterans Resource Center (MVRC) certifies enrollment for undergraduate and graduate students who are eligible for veterans' education benefits. Veterans, reservists, spouses, and children of deceased or disabled veterans should contact the MVRC before enrollment. Veteran dependents and reservists must submit the following:

1. Certificate of Eligibility
2. Certification Request Form

Twelve credits are required to be considered a full-time undergraduate by the Veterans Administration. The minimum full-time requirement for a graduate student is nine credits. In addition to regular sources of financial aid, veterans and dependents of veterans may be eligible for VA education benefits. Benefit programs may be reviewed at www.gibill.va.gov.

Out-of-state students may qualify for in-state tuition rates if they meet the criteria defined in the Choice Act of 2014. If you have questions about your eligibility, contact the Military and Veterans Resource Center (MVRC).

Student Who are Using Veterans Education Benefits on Probation/ Suspension

The School Certifying Official (SCO) is required to notify the VA of any students who are on academic probation/suspension. Probation and suspension will affect your benefits. The VA requires students to make satisfactory progress toward their college degrees. Below are policies for using Veterans Education Benefits for students on probation or have been academically dismissed by the university.

1. **Probation:** Undergraduate students who fall below a 2.00 GPA and graduate students who fall below a 3.00 are placed on academic probation for one semester. Students may continue to use Veterans Education Benefits for the one semester they are on probation. Graduate students who fail to raise their GPA above a 3.00 during the probation period, are dropped from the graduate program, their benefits will be terminated, and will be dismissed from program.

2. *Extended Probation:* Undergraduate students are granted one semester of extended probation by the university. If they are making progress towards academic good standing, they can use their benefits for the semester they are on extended probation. After this period, if not above a 2.00 GPA, benefits will be terminated and will be dismissed from program.
3. *For undergraduate students failing to make a 2.00 GPA after probation,* their benefits will be terminated, and students will be dismissed from program.
4. *Suspension:* Students who have been academically dismissed from the university will have their benefits terminated. The students who are reenrolled in the university can continue to use their benefits once they are in academic good standing (above a 2.00) with the university.

The MVRC serves as a one-stop information and referral site to help students transition to college life and achieve their academic goals by providing military-friendly programs and services to IUP's veteran and military affiliated students. The MVRC is designed to serve student veterans by helping them to find the guidance and information they need to complete their educational goals and by enhancing the sense of community they share with other students in similar circumstances.

For further information, veterans should contact the Director, MVRC, 101 Pratt Hall, Indiana, PA 15705, 724-357-3008. Email may be sent to veterans-affairs@iup.edu. Veterans may also review the IUP veterans website at www.iup.edu/veterans.

IUP Policy for Enrolled Students Called to Active Military Service

IUP provides two options for students who are currently enrolled but called to active military duty before the end of the semester:

Option 1

The student may choose to do a total semester withdrawal from all his/her classes and, under a State System of Higher Education policy, receive a full refund for tuition and fees; any university room and dining hall contract fees would be refunded on a prorated basis for the actual services the student has received up to the date of the withdrawal. This option requires that the student withdraw from every course and receive no grade for any course taken in that semester.

To process a total semester withdrawal, undergraduate students must contact the Office of the Student Advocate at the Student Success Center to complete the necessary paperwork to assign the course withdrawal designations and to start the process for refunds; graduate students must notify the School of Graduate Studies and Research, 101 Stright Hall, (www.iup.edu/graduatestudies).

Any student who has elected to use this option shall be granted re-enrollment for the next semester in which the student wishes to return to IUP. The student's academic standing at the time of re-enrollment shall remain as it was before the call to active military duty.

For federal student aid recipients, the return of Title IV student aid will be applicable. Students who previously received a refund from their Title IV federal aid awards, may have to return these funds to the university so that federal aid programs can be credited appropriately.

Option 2

If a substantial part of the semester (typically two-thirds to three-quarters of the semester) has been completed by the time the student is called for active military duty, he/she may meet with each instructor to determine an appropriate grade. Since assignment of grades is the responsibility of the instructor, he/she may assign whatever grade is appropriate. If the appropriate grade is an "incomplete," IUP will extend the deadline by which the incomplete must be removed to 180 days from the time the student returns from active duty. Any university room and dining hall contract fees would be refunded on a prorated basis for the actual services the student has received up to the date of leaving the university for active duty.

Undergraduate students must contact the Office of the Student Advocate at the Academic Success Center to complete the necessary paperwork to start the process for refunds; graduate students must notify the School of Graduate Studies and Research.

Any student who has elected to use Option 2 who wishes to return to IUP must apply for re-enrollment, which will be granted under this policy.

Questions may be addressed to the Office of the Registrar, 300 Clark Hall, (www.iup.edu/registrar).

Student Affairs Division Areas

Website: www.iup.edu/studentaffairs **Email:** iup-hawks@iup.edu

Student Wellness and Engagement

Website: www.iup.edu/atod **Telephone:** 724-357-1265

Athletics

Website: www.iupathletics.com

The Counseling Center

Website: www.iup.edu/counselingcenter **Telephone:** 724-357-2621

Website: www.iup.edu/haven **Prevention/Education:** 724-357-3947

Department for Disability Access and Advising

Website: www.iup.edu/disabilitysupport **Email:** disability-access@iup.edu

Disability Access and Advising

(Within Department for Disability Access and Advising)

Health and Well-Being (Center for)

Website: www.iup.edu/chwb **Telephone:** 724-357-WELL (9355)

Health AWAREness

Website: www.iup.edu/healthawareness **Telephone:** 724-357-4799

Email: health-awareness@iup.edu

Health Service

Website: www.iup.edu/healthservice **Telephone:** 724-357-2550

Email: health-inquiry@iup.edu

Nutrition Connection

Website: www.iup.edu/foodnutrition/nutritionconnection **Telephone:** 724-357-4797

Housing, Residential Living, and Dining Information

Website: www.iup.edu/housing **Email:** iup-housing@iup.edu or iup-dining@iup.edu

Military and Veterans Resource Center

Website: www.iup.edu/veterans/resource-center **Telephone:** 724-357-3008

Email: iup-mrc@iup.edu

Student Support and Community Standards (Office of)

Website: www.iup.edu/studentconduct

Student Cooperative Association

Website: www.iup.edu/coop

Multicultural Student Leadership and Engagement (Center for) (MCSLE)

Website: www.iup.edu/mcsle

Academic Affairs Division Areas

Timothy S. Moerland, Provost and Vice President for Academic Affairs

John N. Kilmarx, Associate Vice President for Academic Administration
Michele A. Norwood, Associate Vice Provost for Undergraduate Student Success
Karen Rose Cercone, Provost's Associate

Website: www.iup.edu/academicaffairs

Academic Affairs Areas

The areas below provide instruction in several disciplines that are not specific to one of the university's distinct colleges. They offer services and instruction under the direction of the Office of the Provost.

- The IUP Libraries
- Center for Learning Enhancement
- Cook Honors College
- Military Science
- Office of International Education
- Academic Success Center (ASC@IUP)
- Center for Teaching Excellence
- The Harrisburg Internship Semester (THIS)
- Jones White Writing Center
- Career and Professional Development Center

Student Areas of Interest

Student Programs and Services

The services and programs listed in this section are the result of collaborative efforts by student affairs professionals and faculty members to offer the IUP student a unique and fulfilling undergraduate and graduate student experience.

- Student Affairs Division Areas
- Division of Enrollment Management
- University Resources

Admission and Registration

- Undergraduate Admissions Policy
- Freshman Applications
- Transfer Admissions
- Second Baccalaureate Degree
- Act 101 Program
- Teacher Certification
- Placement Test Policy
- Immunization Requirements
- IUP Residency Requirement for Awarding of Degrees
- Program for Visiting High School Students (Dual Enrollment)
- Reenrollment/Readmission Policy for Students Who Withdraw from the University Voluntarily
- The Summer and Winter Sessions

Finances

- Institutional Fees
- Financial Aid

University Leadership

University Policies

Student Rights

- Anti-Hazing Policy
- Retaliation
- Students Rights under the Family Educational Rights and Privacy Act (FERPA)
- Student Rights/Directory Information
- Student Conduct Policies and Procedures
- Sexual Discrimination/Misconduct Policy and Resources

Policies

Title IX Reporting

IUP Civility Statement

Statement of Non-Discrimination

Unmanned Aerial Systems Policy

Undergraduate Academic Policies

Note: Please see individual college sections for policies pertaining only to particular colleges and majors.

- Academic Advising
- Academic Honors
- Academic Integrity Policy
- Academic Standards Policy
- Change of Major
- Class Disruptions
- Classification of Students
- Conflict of Interest Policy
- Dual Baccalaureate Degrees
- Evaluation of Student Progress by Level or Standing
- Excess Credit Load
- Experiential Learning
- Final Examination Policies
- Grading Policies
- IT Acceptable Use Policy
- Inclement Weather Policy and Procedures
- IUP Policy for Enrolled Students Called to Active Military Service
- IUP Student Grade Appeal Policy
- Policy for Holding Exams Outside the Prescribed Course Times
- Prior Learning and Credit/Exemption Examinations
- Research Integrity Policy
- Schedule Changes (Drop/Add)
- Use of IUP E-mail as an Official Means of Communications
- Undergraduate Course Attendance Policy
- University Policy on Semester Course Syllabi
- Visiting Student Program Policy
- Withdrawal Policies

Inclement Weather Policy and Procedures

IUP is committed to the safety and security of its students, faculty, staff, and visitors. Therefore, the decision as to whether university classes or programs and events will be held during period of adverse weather conditions is based on the overall concern for the university community.

There is an important distinction between the decision to cancel classes and the decision to close the university. When classes are canceled, staff, managers, administrators, and faculty members whose responsibilities lie outside the classroom are expected to report to work. Employees choosing not to report to work when classes are canceled will be charged paid leave time--either annual, personal leave, or leave without pay--and must submit leave.

The president has the authority to cancel classes and events or to close the university. The decision to close the university will be made only under the most extreme circumstances. If the decision is made to close the university, only essential employees, as notified by their supervisor, will be required to report to work.

Information about the status of the university is always available on the IUP website, and a link to the Emergency Information page is located at the bottom of every page.

In the event of cancellation of classes or events, or closure of the university, employees should go to the IUP website (www.iup.edu) or call the IUP Information Line at 724-357-7538. Local media outlets (WDAD-AM 1450) and the Indiana Gazette may include information about cancellations or closures, but the most reliable source of information is the IUP website, IUP social media, or IUP Information Line.

IUP Emergency Notification System subscribers will receive a text message in the event of cancellations or closures.

The university's Inclement Weather Policy and Procedures are available under Human Resources Policies. Questions regarding the university's Inclement Weather Policy may be directed to the Office of Human Resources, 724-357-2431.

The president has the authority to cancel or postpone IUP-sponsored or hosted activities or events due to inclement weather conditions or other environmental factors that may jeopardize the safety of patrons traveling to or from the event. If a decision is made to cancel or postpone the activity or event, the vice president of the sponsoring division will assume responsibility for notifying activity or event participants of the cancellation or postponement in an appropriate and timely manner.

Unmanned Aerial Systems Policy

UAS may be operated on university property for academic, research or public safety activities in accordance with federal, state and local laws and regulations and university policies. Operation of UAS on university property must be approved by the Department of Public Safety (DPS). Recreational or personal use of UAS on university property is prohibited, even if such use is a permitted "hobby" use under state or federal laws and regulations.

University departments or employees wishing to fly UAS for university-related purposes off university property must have appropriate permits and property owner permission for the location of the flight. They must also comply with any federal, state, and local laws and regulations of the jurisdiction where the UAS flight is conducted.

Requests for UAS operations on university property must be submitted to the DPS at least five business days prior to the date of anticipated flight. If approved, UAS operators are then required to confirm they will be flying as scheduled by notifying the DPS at (724) 357-2141 at least one hour before flight operations. Departments that are frequent users of UAS may acquire a standing authorization to fly from the DPS; however, the DPS must still deconflict requests for flight operations with any other known event(s) or other issues and notification must still be made to DPS within one hour of flight time.

Definitions Unmanned Aerial Systems (UAS): Any remotely operated or controlled model aircraft intended to fly within the UAS operated without the possibility of direct human intervention from within or on the aircraft. Includes devices commonly referred to as "drones," and may also include communications, support, and navigational equipment. FAA regulations apply to all types of UAS regardless of weight or size.

University Property: Any land, grounds, buildings, or facilities owned, leased, managed or controlled by the university per formal contract or legal agreements. Also included are university owned streets, sidewalks, and bike paths.

IT Acceptable Use Policy

Purpose: This policy addresses the use of information technology resources (IT resources) at Indiana University of Pennsylvania ("the university"). IT resources are intended to support the university's instructional, research, and administrative operations.

Scope: This policy applies to all users of IT resources owned or operated by Indiana University of Pennsylvania. Users include students, faculty, staff, contractors, and guest users of computer network resources, equipment, or connecting resources.

Objective: The objective of this policy is to create a framework to ensure that IT resources are used in an appropriate fashion and support the university's mission and institutional goals.

Policy: Use of the university's IT resources is a privilege and signifies agreement to comply with this policy. Users are expected to act responsibly and follow the university's policies and any applicable laws related to the use of IT resources. This policy provides regulations to ensure IT resources are allocated effectively.

While the university recognizes the role of privacy in an institution of higher learning and will endeavor to honor that ideal, there should be no expectation of privacy of information stored on or sent through university-owned IT resources, except as required by law. For example, the university may be required to provide information stored in IT resources to someone other than the user as a result of court order, investigatory process, or in response to a request authorized under Pennsylvania's Right-to-Know statute (65 P.S. §67.101 et seq.). Information stored by the university may also be viewed by technical staff working to resolve technical issues.

Definitions: For the purposes of the IUP Acceptable Use of IT Resources Policy (AUP), IT resources include the University computer network, all University-owned devices and all University provided software systems regardless of what computer network is being used. This is inclusive of all content transmitted over the University computer network by any device regardless of ownership.

The National Institute of Standards and Technology (NIST) defines Personally Identifiable Information (PII) as any information about an individual, including (1) any information that can be used to distinguish or trace an individual's identity, such as name, social security number, date and place of birth, mother's maiden name, or biometric medical, educational, financial, and employment information.

Responsibilities of Users of IT Resources:

- Respect the intellectual property of authors, contributors, and publishers in all media.
- Protect user identification, password information, and the system from unauthorized use.
- Adhere to the terms of software licenses and other contracts. Persons loading software on any university computer must adhere to all licensing requirements for the software. Except where allowed by university site licenses, the copying of university-licensed software for personal use is a violation of this policy.
- Comply with federal, state, and local laws, relevant university personal conduct regulations, and the terms and conditions of applicable collective bargaining agreements. Applicable laws include, but are not limited to, those regulating copyright infringement, copyright fair use, libel, slander, and harassment.
- Become acquainted with laws, licensing, contracts, and university policies and regulations applicable to the appropriate use of IT resources. Users are expected to use good judgment and exercise civility at all times when utilizing IT resources and respect the large, diverse community utilizing these resources in a shared manner.
- Understand the appropriate use of assigned IT resources, including the computer, network address or port, software, and hardware.
- Comply with the university's Use of E-mail as an Official Means of Communication Policy. Electronic mail should never be considered an appropriate tool for confidential communication. Messages can be forwarded or printed, and some users permit others to review their e-mail accounts. Message content can be revealed as part of legal proceedings. Finally, messages are sometimes not successfully delivered due to a technical issue requiring authorized IT personnel to review message content as part of the troubleshooting process.
- Protect Personally Identifiable Information (PII) on IUP's network by only storing sensitive information when necessary on university drives and adhering to best practices for the proper storage.

Prohibited Uses of IT Resources:

- Providing false or misleading information to obtain or use a university computing account or other IT resources
- Unauthorized use of another user's account and attempting to capture or guess passwords of another user
- Attempting to gain or gaining unauthorized access to IT resources or to the files of another user. Attempting to access restricted portions of the network, an operating system, security software, or other administrative applications without authorization by the system owner or administrator
- Interfering with the normal operation, proper functioning, security mechanisms, or integrity of IT resources
- Use of IT resources to transmit abusive, threatening, or harassing material or other communications prohibited by law
- Copyright infringement, including illegal sharing of video, audio, software, or data
- Excessive use that overburdens or degrades the performance of IT resources to the exclusion of other users. This includes activities which unfairly deprive other users of access to IT resources or which impose a burden on the university. Users must be considerate when utilizing IT resources. The university reserves the right to set limits on a user through quotas, time limits, and/or other mechanisms.

- Intentionally or knowingly installing, executing, or providing to another a program or file on any of the IT resources that could result in damage to any file, system, or network. This includes, but is not limited to, computer viruses, trojan horses, worms, spyware, or other malicious programs or files.

Procedures: Violations of this policy will be reported to appropriate levels of administrative oversight, depending on the statutes and policies violated. Suspected violations of federal and state statutes and local ordinances shall be reported to the director of Public Safety (chief of campus police) for official action.

Nonstatutory violations of the Acceptable Use Policy, such as "excessive use," may be reported to the chief information officer, the associate vice president for Human Resources, the Office of Student Support and Community Standards, and/or the director of Public Safety (chief of campus police).

A university employee or student who violates this policy risks a range of sanctions imposed by relevant university disciplinary processes, including denial of access to any or all IT resources. He or she also risks referral for prosecution under applicable local, state, or federal laws.

The University Senate-via the Library and Educational Services Committee-is responsible for recommending the university's Acceptable Use Policy. Questions regarding the applicability, violation of the policy, or appropriate access to information should be referred to the chief information officer.

Use of IUP E-mail as an Official Means of Communications

Purpose: The purpose of this policy is to define IUP e-mail as an official method of communication for the university.

Scope: This policy applies to all students and employees except those employees who do not normally have access to e-mail.

Objective: The objective of this policy is to define the use of IUP e-mail as an official method of communication and the responsibility of e-mail users to monitor, read, and use their IUP e-mail accounts. As the IUP e-mail system provides a recognized method to authenticate the user, it is suitable to use for official communications.

Policy: Indiana University of Pennsylvania provides e-mail services to all students and employees as an official method of communication. Students and employees (except those employees who do not normally have access to e-mail) have a responsibility to read their IUP e-mail accounts and, if responding to or sending e-mail about IUP business, use their IUP e-mail accounts to do so.

Definitions: *E-mail user* is defined as any student or employee who has been issued an IUP e-mail account. *E-mail account* is an active IUP e-mail (@iup.edu). *E-mail spoofing* is the creation of e-mail messages with a forged sender address.

Responsibilities: Users are expected to check their e-mail accounts regularly and to use their IUP e-mail accounts when responding to or sending e-mail to IUP employees and students about IUP academic and administrative matters.

Procedures: The rationale for this policy is that for faculty members who wish to use IUP e-mail for communication to and from students, there is a policy that states that this is approved. Faculty members can put this policy in their syllabi and other documents. Communicating via the IUP e-mail system facilitates determining the identity of the sender. Users are therefore not permitted to impersonate other users by modifying e-mail header information for the purpose of deception. All forms of e-mail spoofing are prohibited.

Where applicable, academic and administrative offices should publish e-mail addresses that can be used to receive such e-mail. Faculty members should make students aware of their e-mail address by including it on their syllabi or by other means.

Undergraduate Academic Policies

- Classification of Students
- Excess Credit Load
- Schedule Changes (Drop/Add)
- Experiential Learning
- Prior Learning and Credit/Exemption Examinations
- Change of Major
- Academic Advising
- Dual Baccalaureate Degrees
- Academic Honors
- Withdrawal Policies
- IUP Policy for Enrolled Students Called to Active Military Service
- Academic Standards Policy
- IUP Student Grade Appeal Policy
- Academic Integrity Policy
- Research Integrity Policy
- Final Examination Policies

- Undergraduate Course Attendance Policy
- Evaluation of Student Progress by Level or Standing
- University Policy on Semester Course Syllabi
- Inclement Weather Policy and Procedures
- Grading Policies
- Conflict of Interest
- Night Exam Policy
- Class Disruptions
- IT Acceptable Use Policy
- Use of IUP E-mail as an Official Means of Communications
- Visiting Student Program Policy

Note: Please see individual college sections for policies pertaining only to particular colleges and majors.

Classification of Students

To be classified as full-time for the fall, spring, or summer, undergraduate students must be currently enrolled in at least 12 credits. Full-time classification for students enrolled in instructional periods that do not conform to the regularly scheduled academic sessions will be based on the number of enrolled credits during that period of enrollment (e.g., one credit in one week of instruction would equal the minimum full-time certification standard).

For purposes of designating students by class, the following credit classification ranges are used:

Freshmen Fewer than 30 credits

Sophomores 30-59 credits

Juniors 60-89 credits

Seniors 90 credits or more

Class designations are based on credits earned rather than credits attempted. People holding a degree and working toward a second baccalaureate degree may be classified as seniors.

Excess Credit Load

A student who wishes to schedule 18 or more credits must obtain approval from the dean of the college of the student's major; approval will be predicated on various criteria, such as the student's demonstrated competencies, total courses, and specific conditions. If approval is granted, the dean will set the credit limit and make the appropriate computer entry.

Schedule Changes (Drop/Add)

From the student's initial registration time for a given semester through the end of the drop/add period, as defined by the academic calendar (www.iup.edu/academiccalendar), a student may modify his/her schedule to the extent that classes are available or permission to register for a closed or restricted section has been granted and entered into MyIUP. Each student is responsible for completing all appropriate transactions in MyIUP to ensure schedule accuracy. Note that, while the department may enter permission to register for a section, the student must complete the actual registration transaction in MyIUP.

Experiential Learning

Internship Experiences

University-sponsored internships are often an important part of an academic program. Students may apply for an internship if they have completed 60 credits and have at least a 2.0 GPA. Forty hours of supervised internship is equivalent to one academic credit hour. A maximum of 12 credits is applicable to an undergraduate degree program from internship experiences. Internships are available at a variety of venues, such as governmental agencies, businesses, foundations, and other organizations.

Students who are interested in internships must consult with their program's academic advisor, since they may need to meet additional internship requirements specific to their program, department, or college.

In all cases, an approved agreement between the university and the external organization at which the internship will be performed must be in place before the student can be enrolled for internship credit.

Cooperative Education (Co-ops)

Some departments allow students to participate in cooperative education experiences. These experiences provide students with opportunities to gain practical work experiences related to their academic programs. These experiences may be the first contact students have working in their profession. They are often offered for zero credit and are typically unpaid.

Students may apply for co-ops if they have completed 30 credits and have at least a 2.0 GPA. They typically participate in these programs during their sophomore or junior years, often during the summer. Interested students need to consult with their academic advisors concerning the availability and requirements of co-ops within their department.

In all cases, if students decide to register for a co-op course, an approved agreement between the university and the external organization at which the co-op experience will be performed must be in place before the student can enroll in the course.

Prior Learning and Credit/Exemption Examinations

There are a variety of examinations through which students may earn college credit or exemptions. Courses for which credits or exemptions are awarded by examination will not be used in the determination of GPAs.

When a student receives credit for a course by examination, the credit will be applied to graduation requirements just as though the course had been taken. A student who passes an exemption examination will be exempt from taking that course in his/her academic program. If a student is granted exemption only (no credits) from a course, he/she may need to take another course to fulfill degree requirements.

Where examinations are not available, portfolio assessment may provide a student with the opportunity to earn university credit for college-level learning gained through work and life experience. Each department will determine the maximum number of credits to be awarded for portfolio assessment for its majors.

No more than one-half of the credits required for a student's major may be earned through any combination of examinations or portfolio assessment, nor can these credits be applied toward university residency requirements for awarding of degrees.

Advanced Placement Examinations

Courses taken by students before college admission under the Advanced Placement Program of the College Entrance Examination Board may be recognized by the award of college credit. Those who earn a score of 3, 4, or 5 in the Advanced Placement Examination may be granted credit toward the number of credits required for graduation. For questions regarding the granting of Advanced Placement Examination credits, consult with Transfer Services in the Admissions office.

CLEP/ DSST Examinations

Students who have had other opportunities for instruction or who have advanced in a given field may gain credit for a course through the College Level Examination Program (CLEP) offered through University Testing Services. For questions regarding the granting of CLEP examination credits, consult with Transfer Services in the Admissions office.

International Baccalaureate Examinations

Courses taken by students before college admission under the International Baccalaureate Program may be recognized by the award of college credit. Those who take and pass the Higher-Level examination with a 4 or higher may be granted credit toward the number of credits required for

graduation. For questions regarding the granting of International Baccalaureate examination credits, consult with Transfer Services in the Admissions office.

Departmental Examinations

In some departments, students have an opportunity to gain exemption or credit through successful completion of comprehensive examinations by requesting from the academic department an exam as a substitute for completing all the usual requirements of the course.

Portfolio Assessment

Portfolio assessment may provide some students with the opportunity to present evidence of learning for evaluation by a faculty member. It is designed for those with extensive documentable knowledge from work experience, travel, independent study, or other out-of-class experiences. Through portfolio assessment, these experiences are evaluated to determine their appropriateness and applicability for university credit.

Credit awarded through portfolio assessment must conform to specific course titles in the *Undergraduate Catalog* (i.e., no credits will be awarded for general areas of knowledge) and will only be awarded for undergraduate courses. Only currently enrolled students are eligible to request portfolio assessment, and any credits awarded must be intended for use as part of a degree or certificate program.

Before portfolio assessment credits can be awarded, approval must be obtained from the chairperson of the department offering the course, the dean of the appropriate IUP college, and the director of the Office of Extended Studies. Once approved, the title of the course, the credits, and indication that credit was earned through portfolio assessment will be recorded on a student's academic record.

If a related examination is available through the College Level Examination Program (CLEP) or if a departmental examination has previously been established for the course, a portfolio assessment of those credits will not be accepted.

For information about portfolio assessment fees and instructions on how to apply for portfolio assessment, consult with the Office of Extended Studies.

Change of Major

To qualify for a change of major, a student must be in academic good standing (2.00 cumulative GPA). This requirement does not apply to students in their first semester at IUP without a GPA. All students must meet any other requirements specific to the new major. All teacher certification programs have requirements beyond a 2.00 GPA. Please refer to the individual college sections in this catalog for change of major policies pertaining to specific colleges and majors.

A student must apply for a change of major on MyIUP - under Academics/Academic Record, Change of Primary Major. Before seeking a change of major, the student should consult with the departmental chairpersons of both the "old" and "new" majors.

When a student changes colleges, the dean (or dean's designee) of the college of the new major will evaluate the student's credits before approving the change. A copy of the evaluation will be made available to the student and his/her new advisor if a change of major is affected.

In cases involving students who are veterans, the dean (or dean's designee) of the new major shall give the veteran a statement of prospective approval and the effective date of the proposed changes. This statement shall also indicate the amount of extended time the change of major will entail, if any.

The veteran shall take this statement to the veterans' counselor at least one month before the effective date of the change. No change of major shall be made by veterans until VA approval has been assured.

Academic Advising

All students are assigned academic advisors. In some curricula, the advisors continue with the same group of advisees from year to year. In other curricula, the freshman advisors remain with their advisee groups only for the students' first year. The student is then assigned an academic advisor for the remaining years to his/her degree in a chosen field. Faculty members advise students on academic achievement, dropping courses, changing curriculum, student activities, study schedules, and career options. Students may identify advisors by signing in to MyIUP (my.iup.edu), selecting the

"Academics" page, and then under the "Advising" section, selecting "Advisor contact information." Students should then contact their advisors. Should a student fail to identify an advisor, he/she may contact the chairperson of the department for an advisor assignment.

While a faculty member serves to advise the students as they progress to graduation, students are ultimately responsible for knowing and fulfilling the requirements for graduation in their degree program.

Dual Baccalaureate Degrees

A student who has earned a minimum of 28 undergraduate credits from IUP and is in good academic standing may apply to pursue a second baccalaureate degree concurrently with the first. This application must be submitted to the dean of the college in which the major program of study for the second baccalaureate degree is housed. If admitted to a second baccalaureate degree program, the student must designate one of the two degree programs to be primary. To receive both degrees at graduation, the student must earn at least 30 credits beyond the requirements of the designated primary program of study. The student must earn a minimum of 150 credits to receive both degrees concurrently. Furthermore:

1. The student may not be graduated until both the degrees are completed.
2. All requirements for the curriculum of each degree must be satisfied.
3. A course required in both degree programs does not have to be repeated for the second degree, but exceptions might apply at the departmental level.
4. All university requirements, such as a minimum GPA and number of residency credits taken at IUP in the major, must be met for each degree separately.
5. Should a student elect to discontinue the pursuit of receiving two baccalaureate degrees simultaneously and decide to apply for graduation with one degree, the student will be bound to the Postbaccalaureate Studies requirements if a later return to IUP is desired.

Undergraduate Course Attendance Policy

The university expects all students to attend class.

Individual faculty members may define attendance standards appropriate to each course and the consequences of not meeting those standards, within the following guidelines:

1. Each policy must be distributed in writing during the first week of the course. Normally, it is expected that the information dealing with class attendance standards will be distributed with the course syllabus.
2. Each policy must define some limited level of allowable absence.
3. Each policy must recognize students' need to miss class because of illness, personal emergency, university-sponsored activities, bereavement, or active military duty.
4. Each policy must not penalize students who add the class during the regular or specified university drop-add period and must allow those students to make up work missed before adding the class.

Bereavement-related Class Absences

The university community recognizes the impact that the loss of a family member or loved one may have on the emotional and academic wellbeing of a student. In such circumstances, a student may request that a bereavement absence notification be sent to their faculty by contacting either the Office of the Student Advocate at the Academic Success Center or the dean's office of the college of their major, who will send an e-mail to the student's faculty stating that the student is away from the university due to the death of a family member or loved one. Documentation that verifies the death (e.g., a funeral program, death notice, obituary, etc.) and the nature of the student's relationship to the deceased may be requested.

The university encourages allowances for the grieving process, while acknowledging the faculty member's right in determining the terms of variance from the course syllabus. The student is expected to take the initiative to make all arrangements for meeting academic requirements. The university community also encourages students affected by a loss to contact the IUP Counseling Center or other university and community resources, as appropriate, if they are in need of ongoing emotional support.

Anticipated Class Absence for University Representation and Participation

The university community recognizes the value of student participation in cocurricular and extracurricular activities of the university, while acknowledging the faculty member's right to determine the terms of variance from the course syllabus. Ideally, the student is expected to notify the professor as soon as the student knows that a class will be missed due to a university sponsored event. The faculty may request documentation signed by the activity director, coach, or advisor detailing the specifics of the event in advance.

The student must take the initiative to make all arrangements for meeting academic requirements before the anticipated class absence. Excused absences for participation in university-sponsored events will not result in a penalty to the student, provided that the student makes up missed work as required by the professor.

Evaluation of Student Progress by Level or Standing

Each college shall to determine a scheme for evaluating the development and progress of its major students.

A college may use a screening procedure that requires all students enrolled in a specific semester or who will complete a specified number of credits attempted by the end of the current semester to apply for approval for advancement.

All students should check with their faculty advisors to determine if their college uses a screening procedure and, if one is used, what the criteria for that procedure are. Students should also refer to their college's section of the Undergraduate Catalog.

University Policy on Semester Course Syllabi

Each faculty member shall prepare and distribute a course syllabus, without charge, to each student within one week of the start of the course. The syllabus will be consistent with the course content and catalog description that was approved by the Curriculum Committee of the University Senate for the initial course offering or revision. Course syllabi may be distributed in hard copy or electronic versions. The course syllabus is a vehicle of communication to promote student academic planning and to avoid misunderstandings of the course plan and requirements.

It is recommended that each syllabus include

1. the faculty member's name, office location, telephone number, IUP e-mail address, and office hours,
2. an outline of the course content, objectives, and prerequisites, as appropriate,
3. information about any required textbook(s) with title, author, and edition, as well as any other required materials,
4. information on the determination of grades, including the weight, types, and scheduling of evaluations, other planned requirements, academic integrity, expectations for class participation, and attendance,
5. a statement of policies and/or penalties for make-up exams and late submission of assignments,
6. a statement addressing accommodations for students with disabilities.

Inclement Weather Policy and Procedures

IUP is committed to the safety and security of its students, faculty, staff, and visitors. Therefore, the decision as to whether university classes or programs and events will be held during period of adverse weather conditions is based on the overall concern for the university community.

There is an important distinction between the decision to cancel classes and the decision to close the university. When classes are canceled, staff, managers, administrators, and faculty members whose responsibilities lie outside the classroom are expected to report to work. Employees choosing not to report to work when classes are canceled will be charged paid leave time--either annual, personal leave, or leave without pay--and must submit leave.

The president has the authority to cancel classes and events or to close the university. The decision to close the university will be made only under the most extreme circumstances. If the decision is made to close the university, only essential employees, as notified by their supervisor, will be required to report to work.

Information about the status of the university is always available on the IUP website, and a link to the Emergency Information page is located at the bottom of every page.

In the event of cancellation of classes or events, or closure of the university, employees should go to the IUP website (www.iup.edu) or call the IUP Information Line at 724-357-7538. Local media outlets (WDAD-AM 1450) and the Indiana Gazette may include information about cancellations or closures, but the most reliable source of information is the IUP website, IUP social media, or IUP Information Line.

IUP Emergency Notification System subscribers will receive a text message in the event of cancellations or closures.

The university's Inclement Weather Policy and Procedures are available under Human Resources Policies. Questions regarding the university's Inclement Weather Policy may be directed to the Office of Human Resources, 724-357-2431.

The president has the authority to cancel or postpone IUP-sponsored or hosted activities or events due to inclement weather conditions or other environmental factors that may jeopardize the safety of patrons traveling to or from the event. If a decision is made to cancel or postpone the activity or event, the vice president of the sponsoring division will assume responsibility for notifying activity or event participants of the cancellation or postponement in an appropriate and timely manner.

Grading Policies

After each semester or session, a grade report will be available to each student by signing in to MyIUP (my.iup.edu).

Grades and Quality Points

In the grading system, the following grades are used in reporting the standing of students at the end of each semester or session:

Grade	Description	Quality Points
A	Excellent	4 quality points/credit
B	Good	3 quality points/credit
C	Average	2 quality points/credit
D	Pass	1 quality point/credit
F	Fail	0 quality points/credit
N	Non-Participation Fail	0 quality points/credit
P	Pass	0 quality points/credit (for credit courses only)
S	Satisfactory	0 quality points (for 0-credit courses only)
U	Unsatisfactory	0 quality points (for 0-credit courses only)

Other Designations (carrying no quality points):

AUD Audited Course

EXM Examination

FOL Portfolio Assessment

I Incomplete-For more information, see policy explanation.

- L** **Late Grade/Continuing Course**-For more information, see policy explanation.
- OL** **Other Location**
- Q** **Total Semester Withdrawal**-Used before 2002 when a student had totally and officially withdrawn from the university for a given semester
- R** **Research in progress** (graduate thesis/dissertation only)
- TR** **Transfer**
- XMT** **Exemption**
- W** **Withdrawal**-For more information, see policy explanation.
- * **Grade not reported by instructor.** No grade information was reported by the end of the normal grading period.

Grades followed by the following designations indicate the application of a policy that has amended the student's cumulative grade point average.

- . **Institutional Credit** (credit counts toward enrollment status but does not count toward graduation or in GPA calculation)
- .. **Canceled Semester** (see policy explanation)
- * **Fresh Start** (see policy explanation)
- : **Extended Credit** (graduate thesis/dissertation only)

Determining GPA

Cumulative grade point average (CGPA) is determined by multiplying the credits for a course by the quality points received for that course. Then, the total number of semester quality points for all courses is divided by the total number of credits attempted.

Quality points are not calculated for credits from other schools (i.e., a student transferring from another school earns quality points only on work taken at this university).

Institutional credits are associated with courses numbered below 100. Institutional credits do not apply to degree requirements for graduation but are used to determine enrollment status (full- or part-time), including financial aid and athletic (NCAA) eligibility.

Conflict of Interest Policy

To fulfill the university's educational mission and uphold standards of academic integrity, faculty members are expected to avoid apparent or actual conflicts of interest, favoritism, or bias. Ideally, instructors shall refrain from teaching any person to whom they are related, including their own children, other close relatives (including but not limited to immediate family members), or romantic partners. Instructors with any conflicts of interest have a duty to report, in a timely fashion, the existence of the conflict to their dean. As part of the disclosure, the instructor shall submit to the dean a strategy or plan that would mitigate the conflicts

Audit Policy

All audited courses will be identified as such on the student's grade report and transcript. Work taken on an audit basis will not be graded and will not count toward the fulfillment of requirements for a degree to be awarded by IUP. Since credits attempted and quality points will not be awarded for

audited courses, they will not affect the student's grade-point average in any way. Auditors will pay normal tuition and such other fees as may be required for the course.

To audit an undergraduate course, a person must be admitted to the university and have met course prerequisites. Students wishing to audit a course for which they registered should obtain a Course Audit form from the office of the department offering the course. Students must first register for the course before filing a course audit form. All audit processing, including revocation of previously requested audit classification, must be completed during the regular drop/add period. Copies of the completed form are returned to the Office of the Registrar, to the department chairperson, and to the student. Audit students have the same privileges as other students in all course work. There is no limit on the number of courses which may be audited.

Midterm Grade Report Policy

To help undergraduate students monitor their academic performance, faculty members will provide a warning to students with unsatisfactory performance at midterm. Each semester, the registrar will establish and announce the dates for the window within which midterm grades may be posted by faculty members and read by students and advisors. Faculty members will assign a midterm grade of "D" (danger or potential failure), "F" (failure), or "N" (nonparticipation failure) by using MyIUP (*my.iup.edu*).

The midterm grade is an advisory grade and is not a permanent part of a student's academic history. It is not used to determine enrollment status, dismissal, or eligibility for financial aid, housing, or athletics.

Pass-Fail Policy

A student may take courses on a pass-fail basis to a total of 15 credits throughout his/her university career. The student is limited to one pass-fail course in any given semester during the sophomore, junior, and senior years. All courses in the student's Liberal Studies program and courses that meet major and minor requirements are excluded from this prerogative. When scheduled, such a course shall be included in the student's normal course load for the semester.

The student must declare his/her intent to choose pass-fail in a specific course no later than six weeks after the beginning of the semester or the equivalent time span in a summer session. Once declared, this pass-fail option may not be revoked. Instructors will not be notified of the identity of pass-fail students in their courses. The grade given by the instructor will be translated to a "P" or "F" during grade processing.

A student shall be given academic credit without quality points for a course taken pass-fail upon receiving a passing mark in the course. The credits successfully completed under pass-fail ("passed"), within the overall 15-credit limitation, shall be recorded as counting toward the total credits earned for graduation but not toward the credit-attempted data used in the calculation of the cumulative grade point average. However, if a student fails a pass-fail course, he/she will receive an "F" or "N" (non-participation failure) grade and the corresponding grade point average. An "F" or "N" earned under the pass/fail option may be repeated only under the graded option. (Currently, one course is an exception to the Pass-Fail Course Policy. NMDT 434 is offered only on a pass-fail basis.)

The summer sessions, collectively or in any combination, shall be considered a unit similar to a spring or fall semester for pass-fail purposes. Hence, a student is permitted to take only one course during the summer on a pass-fail basis.

I (Incomplete) Policy

The designation of "I" is used to record work, which so far as covered, is of passing grade but is incomplete because of personal illness or other unavoidable reason. Changes of grade to convert designations of "I" must be received in the Office of the Registrar no later than the final day of classes in the next regular (fall/spring) semester after the designation was assigned. If the faculty member does not change the "I" designation using a Change of Grade Form, it will be converted to an F.

In rare circumstances, the student and/or faculty member may ask for an extension of the deadline. In this event, the dean of the college in which the course is taught may approve the extension, providing the faculty member concurs. To monitor designations, the registrar shall submit to department chairs routine semester reports of outstanding "I" designations.

Procedure

A faculty member assigning the "I" designation must complete an Incomplete Grade form with the dean's office indicating the work to be completed, deadlines for completion (it is not necessary to permit the maximum allowable time), and guidelines to establish a final grade. Copies of the completed form will be sent to the department chairperson, the dean of the college in which the course was taught, and the student receiving the "I" designation.

Upon completion of the course work, or notification by the student that the course work will not be completed, the faculty member must submit a Change of Grade form to indicate the final course grade.

Receiving an "I" designation in a course means that the course DOES NOT satisfy prerequisites.

L (Late Grade, Continuing Course) Policy

The designation of "L" (Late grade, continuing course) is appropriate for cases in which student work is expected to extend beyond a given semester/session. The designation of "L" is not to be confused with a designation of "I," which is only appropriate for individual students unable to complete their course work because of unexpected illness or personal emergency. "L" designations are appropriate for

1. internships, practicums, field experience courses, workshops, and independent studies that, by design, extend beyond the normal end of the grading period,
2. others as approved by the department chairperson and the dean of the college in which the course is taught. If a specific course is always eligible for "L" designations, the dean may grant standing approval for "L" designations every time the course is offered.

Faculty members wanting to use the "L" option for eligible courses must notify the registrar two weeks before the end of classes so that the grades can be pre-entered. "L" designations that are not prerecorded may be given only with the permission of the department chairperson and the dean of the college in which the designation is awarded.

Instructors will convert "L" designations to letter grades at the end of the course. Unless an extension is obtained from the dean of the college in which the course was taught, an "L" designation unresolved at the end of one year will be converted to an F.

To monitor "L" designations, the registrar shall submit to each faculty member routine semester reports of all outstanding "L" designations awarded by that faculty member. The purpose of these reports is to help inform faculty members as they help students complete their course work.

The "L" designation is considered as having MET the prerequisite for subsequent course enrollments.

Grade Change Policy

Once earned grades have been recorded, they may be changed only in the case of clerical and/or calculation error or in the event of a successful grade appeal. It is not appropriate to change a grade based on options, such as supplemental assignments, that are not equally available to all students. The deadline for corrections of clerical and/or calculation errors is the end of the next regular (fall/spring) semester after the grade has been awarded.

Course Repeat Policy

A student may not normally repeat an academic course. Exceptions to this policy are

1. **Repeatable courses:** Certain courses are eligible for repeat for credit and grade. These courses are advanced art studio courses, music ensembles, special topics courses (281, 481) if the topic is different, and other specifically designated courses.
2. **D, F, and N grades:**
 1. *Repeat with replacement:* Undergraduate students are permitted to replace the grades and quality points in the GPA calculation for courses in which they receive a "D," "F," or "N" grade by repeating that course at IUP. No more than six repeat-with-replacement attempts are permitted for undergraduate students. A single course can be repeated a maximum of two times. The most recent grade (regardless of whether it is higher or lower) will be the grade used in the GPA calculation. However, the transcript continues to document all academic work, and repeated courses are not deleted from the visual record.
 2. *Course transfers:* Students seeking to replace or average "D," "F," or "N" grades must repeat these courses at IUP. If an IUP course in which a student received an "F" or "N" is repeated at another institution, the credit will transfer to IUP if the course grade is "C" or better, but the original "F" or "N" will continue to count toward the IUP GPA. If an IUP course in which a student received a "D" is repeated at another university, neither the grade nor the credit will transfer.

3. *Postbaccalaureate students (Undergraduate)*: Students seeking to replace or average "D," "F," or "N" grades must repeat these courses at IUP. If an IUP course in which a student received an "F" or "N" is repeated at another institution, the credit will transfer to IUP if the course grade is "C" or better, but the original "F" or "N" will continue to count toward the IUP GPA. If an IUP course in which a student received a "D" is repeated at another university, neither the grade nor the credit will transfer.
3. **Other grades**: Courses in which students earned a grade of "A," "B," "C," or "P," may be repeated only on an audit basis. New grades will not be assigned, and additional credit will not be awarded.

Canceled Semester Policy

The Canceled Semester Policy provides for cancellation from the cumulative record of the effects of **one semester below a GPA of 2.00** for the purpose of helping a student improve academic standing. The student must have been separated from the university for two calendar years (24 consecutive months).

Semester to be canceled refers to any semester of enrollment, whether full- or part-time. Students may elect to use an enrolled summer as their "semester" to be canceled. The entire summer of any given year will be treated as a semester for the purpose of cancellation of grades. Cancellation removes the mathematic effect of all grades (passing, failing, withdrawals) from the semester, but there is no abridgement of the transcript. All courses and original grades remain visible on the official transcript; credit toward graduation remains for those credits associated with passing grades.

A student readmitted under this policy must meet current degree requirements and will be reviewed under current academic standards requirements applicable at the time of readmission.

This policy may be invoked only once in a student's undergraduate enrollment in the university. While readmission may be based on the application of the canceled semester, the transcript record will reflect this only after the student is enrolled and attending IUP. It is not a tool to qualify for transfer to another institution.

The student must apply to the college of which he/she was a member at the time of last enrollment. If a student wishes to enter a major in a college other than the one from which he/she was separated, he/she will apply to the original college, which will forward the application and related records to the new college for action. The college will inform the Office of the Registrar if the application is approved. Authorization for registration will come from that office.

Fresh Start Policy

A student who has been separated from the university for a minimum of two calendar years (24 consecutive months) and has been readmitted may apply for a Fresh Start from the appropriate college dean or designee. Having reviewed the prior and intervening factors for evidence of potential for improved academic success, the college dean or designee may implement this policy.

This policy may be applied only once. For a first bachelor's degree, a minimum of 30 credits must be completed at IUP after a student returns to IUP under this policy. For a first associate degree, a minimum of 15 credits must be completed at IUP after a student returns to IUP under this policy.

A student who wishes to enter a major in a college other than the one from which he/she was dismissed will apply to the original college, which will forward the application and related records to the new college for action.

Conditions for a Fresh Start Record: All credits and grades for IUP course work taken before readmission under this policy shall remain on the transcript. Upon readmission, a new cumulative (GPA) is established based on credits and grades earned from the date of readmission.

Prior Record: Previously accepted transfer credits and IUP courses in which grades of "C" or better were earned before readmission will be reviewed in terms of appropriateness (applicability, timeliness) to the new degree. Those courses, approved by the college dean or designee, will be counted as credits earned and applied toward graduation in the manner of transfer credits.

Academic Standards: A student who is readmitted under the provisions of this policy shall be required to meet current degree requirements. He/she shall be academically reviewed under the policies published in the academic catalog at the time of rematriculation. A student readmitted under this policy waives the right to exercise the Canceled Semester Policy.

Fresh Start Program/Canceled Semester: Students readmitted under the Fresh Start Program, or who have had a canceled semester, must still meet the financial aid qualitative and quantitative SAP requirements (using all previously enrolled semester data). Federal regulations do not permit the financial aid office staff to remove or ignore any academic statistics.

Academic Honors

IUP recognizes academic achievement through Provost Scholars, Dean's Lists, and graduation honors.

Provost Scholars

Provost Scholars are recognized annually. At the start of the fall semester, any undergraduate student who meets all of the following requirements will be named a Provost Scholar if he or she

- is a candidate for first bachelor's degree,
- is a current junior or senior with a minimum of 45 credits earned at IUP,
- has a cumulative GPA of 3.50 or higher,
- has not received this award previously (recognition is given only once).

Dean's List

Undergraduate students receive recognition on the Dean's List for each semester (or summer session cumulatively) in which they earn at least a 3.25 GPA based on at least 12 credits of graded (not P/F) undergraduate course work, or a combination of graded undergraduate course work and graded graduate course work applying to the baccalaureate degree.

Graduation Honors

Traditional Latin honors are awarded at graduation to first bachelor's degree candidates with appropriate academic records. Calculation is based on all undergraduate credits and quality points earned at IUP. Graduation honors are not granted for second (subsequent) degrees. The distinctions are

Cum laude-3.25 to 3.49 cumulative GPA

Magna cum laude-3.50 to 3.74 cumulative GPA

Summa cum laude-3.75 to 4.00 cumulative GPA

Withdrawal Policies

Individual Course Withdrawal Policy

The Individual Course Withdrawal Policy provides students who are unable to complete a course with the option of withdrawing from that course. This option should be taken only after other options have been discussed with the instructor and/or the student's advisor.

Individual Course Withdrawals may be processed by signing in to MyIUP (*my.iup.edu*) between the day after the conclusion of the drop/add period and the end of the first two-thirds of the course. After the two-thirds point of a course, students may no longer process Individual Course Withdrawals.

A student needing to withdraw from a course after the deadline must process a request through the office of the dean of his or her college. Approval of the late withdrawal is contingent on documentation of catastrophic circumstances preventing the student from completing the course. If approved, the college office will arrange for recording the "W" designation.

Since instructors inform students of their unsatisfactory performance in class before the withdrawal deadline (Midterm Grade Report Policy), students will be able to discuss course withdrawals with instructors and/or academic advisors to assess alternatives. Students should be aware of the potential impact of course withdrawal on activities that require full-time status, such as financial aid eligibility (percent of completion and eligibility to move to the next class level), athletic eligibility, and health insurance. Students are also cautioned to consider the detrimental impact of "Ws" in a transcript review by a prospective employer or graduate school.

Total University Withdrawal Policy

The Total University Withdrawal Policy provides students who are unable to complete a term with the option of withdrawing from all classes, and thus from the university, for that term. During the fall and spring semesters, Total University Withdrawals may be processed between the first day of classes and the end of the 11th week of the term. During summer and winter terms, the deadline is the two-thirds point of each course for which the student is registered. Questions about academic impact of withdrawal should be directed to the Department for Disability Access and Advising (see "Process" below). Questions about the financial impact of withdrawal should be addressed to the Office of the Bursar and/or the Office of Financial Aid.

Late Withdrawal: Any undergraduate student who needs to withdraw from the university after the deadline must process a waiver through the office of the dean of his or her college. Approval of the waiver is contingent on documentation of catastrophic circumstances preventing the student from completing the term. Approved waivers must be submitted to the Department for Disability Access and Advising and attached to the Total University Withdrawal form for processing as below.

Involuntary Withdrawal: Any undergraduate student involuntarily withdrawing from the university as a result of suspension or expulsion unrelated to violations of the Academic Integrity Policy will automatically have the designation of "W" assigned to each registered course as a result of such judicial action.

Process: Undergraduate students voluntarily withdrawing from the university should first review information on withdrawals on the Academic Success Center website (www.iup.edu/success) and confirm the financial impact of withdrawal by meeting with a representative from Financial Aid. Then they must process a Total University Withdrawal Form either via MyIUP (my.iup.edu) or by form completion with the Office of Student Advocate. Once the Total University Withdrawal has been processed, a withdrawal designation ("W") will be assigned to all registered courses from which the student is withdrawing. There are no financial leniencies for withdrawals caused by medical situations. IUP's percentage of forfeiture rates follow state and federal dictates, which do not address medical situations.

Readmission: Students should refer to the Readmission Policy in the Admissions section of this catalog for further information about returning to IUP.

Involuntary Withdrawal Policy

Purpose: The purpose of this policy is to provide a procedure for determining whether an identified student's behavior poses a direct threat (as defined herein) and for responding to such behavior. Rarely does student behavior pose a direct threat. However, involuntary withdrawal may be appropriate when

- the student displays behavior that is not prohibited by and/or could not be adjudicated by the Student Behavior Regulations or the Academic Integrity Policy, but that nonetheless poses a direct threat; and
- the student demonstrates a risk of repeated display of such behavior.

Policy: In the absence of other reasonable means or university procedures available for addressing a student's behavior that poses a direct threat, the university will conduct an individualized assessment of the student behavior and circumstances related to the observed behavior of concern and, if appropriate, implement the involuntary, total withdrawal of the identified student from the university.

The student may appeal an involuntary withdrawal decision or may seek re-enrollment to the university at a later time, in accordance with the guidelines and procedures articulated below. The decision regarding an appeal or re-enrollment request will be considered on the basis of whether the student continues to pose a direct threat.

The policy will be applied in a nondiscriminatory manner, and decisions will be based on consideration of the student's conduct, actions, and statements, not on knowledge or belief that the student has a disability.

Definitions:

1. **Direct Threat:** behavior that poses
 - significant risk to the health or safety of others, or
 - significant risk of damage to university property, or
 - substantial disruption to the activities or education of other students
2. **Significant Risk:** behavior that has a high probability (not just a slightly increased, speculative, or remote risk) of substantial harm to the university community, given information concerning the behavior that is available at the time of consideration

3. **Substantial Disruption:** behavior that continually and considerably interferes with other students' participation in academic, work, extracurricular, housing/residence life, or other university-related activities

Procedures:

1. Review Process

1. When made aware of an identified student whose behavior could warrant involuntary withdrawal, the vice president for Student Affairs (or designee) will convene and oversee an Involuntary Withdrawal Review Team to conduct an individualized assessment of the student behavior and circumstances related to the observed behavior of concern and advise him/her whether a direct threat exists. Members of this team will include a representative from the Health Service, the Counseling Center, Disability Support Services, and the student's academic dean (or designee). Depending on the nature of a particular case, and in accordance with FERPA and other relevant laws, other individuals who can assist in evaluating the potential risk posed by the student's behavior, including professionals qualified to interpret the information available for consideration, may be identified to advise the vice president and review team.

The goal of the vice president and review team will be to ascertain whether the student's behavior poses a direct threat. Factors to consider may include

- the nature, duration, and severity of the risk of harm;
 - the likelihood that the potential harm will occur;
 - if the student asserts to have a legally protected disability entitled to reasonable accommodation, whether reasonable modification of university policies, practices, and procedures would sufficiently mitigate the risk.
2. The vice president and review team may request to review educational records and/or to consult with various university community members or others who may be knowledgeable of the student and/or the behavior of concern.
 3. The vice president and review team may request that the student take part in a medical/psychological evaluation. In such a case, the vice president and review team will identify a qualified and licensed health professional who is independent from the university to conduct the evaluation. The university will be responsible for the fees associated with this evaluation.
 4. The vice president and review team will request a personal meeting(s) with the student. Although it is highly desirable that the student choose to attend such a meeting(s), the review process may proceed if he/she does not attend. Furthermore, the direct threat review process will proceed regardless of the student's ongoing university status. At the meeting(s), the vice president and review team will present and discuss the information that is available for consideration. The student may choose to have an advocate accompany and take part with him/her in the meeting(s).
 5. Based on the review team's assessment, including consultation with professionals qualified to interpret the information available for consideration, the vice president may conclude that a direct threat exists and, if so, will determine an appropriate next step, which may entail involuntary, total withdrawal of the student from the university but would not preclude other actions depending on the particular situation.
 6. The review decision will be communicated by the vice president to the student and will provide the primary information that led to the decision. Any conditions for later re-enrollment will also be communicated at that time. The decision and related information will be communicated in writing to the student and may be additionally communicated in other forms if the situation permits.
 7. At any time before conclusion of the review process, the student may withdraw voluntarily.

2. Appeal Process

1. The decision of the vice president may be appealed in writing by the student to the IUP president.
2. An appeal must be filed within 90 calendar days after the decision of the vice president is communicated in writing to the student.
3. The president's decision on the appeal will be final and conclusive.
4. During the appeal process, the student will remain totally withdrawn from the university.

3. Re-enrollment Process

1. A student for whom the vice president for Student Affairs concluded a direct threat exists may later request re-enrollment to the university. A request must be made to the vice president for Student Affairs. In his/her request, the student should provide evidence that he/she would no longer pose a direct threat and that any conditions for re-enrollment have been met. Such student is responsible for any fees associated with treatment, activities, and/or evaluations that he/she has taken part in or obtained in an attempt to demonstrate appropriateness for re-enrollment.
2. The vice president will convene and oversee the Involuntary Withdrawal Review Team regarding the re-enrollment of the student.
3. The vice president and review team may request an updated, independent, university-obtained medical/psychological evaluation and/or request to meet with the student. The university will be responsible for the fees associated with this evaluation.
4. The decision of the vice president will be based on a determination of whether the student can return safely to the university community and no longer pose a direct threat.

4. Emergency Situation

At any time before the initiation or conclusion of the review process, the vice president may implement an interim involuntary withdrawal

of the student from the university, should immediate action appear warranted. A review process, as outlined above, will occur as soon as reasonably possible to consider the interim decision.

Recession: This policy will not be rescinded or modified except by action of the IUP president, following consultation with the University Senate, and in accordance with University Senate Bylaws and Constitution.

Publications Statement: The IUP Office of the Vice President for Student Affairs will publicize and transmit this policy to all members of the university community.

Withdrawal from IUP and Its Impact on Student Financial Aid

Students taking a total university withdrawal from all of their courses at IUP may find their financial aid for that particular semester affected. The 1998 Reauthorization of the Higher Education Act requires educational institutions to calculate a Return of Federal Student Aid Funds (Title IV aid) for students who withdraw from all classes on or before the 60 percent attendance point in the semester. A pro-rata schedule is used to determine the percentage of the semester attended; that percentage determines the amount of federal funds earned. The Office of the Bursar applies the federal guidelines and returns the unearned portion to the federal programs in the following order: (1) Unsubsidized Federal Direct Loan, (2) Subsidized Federal Direct Loan, (3) Federal Perkins Loan, (4) Federal Direct PLUS Loan, (5) Federal Pell Grant, and (6) Federal Supplemental Educational Opportunity Grant.

Example: If a student withdrew on the 32nd calendar day of a semester that encompassed 106 calendar days (not including breaks of five or more days), the student would have attended 30 percent of the semester. Therefore, the student would have earned 30 percent of his or her federal aid.

In addition to affecting current eligibility, a total withdrawal can affect future eligibility for financial aid. Please refer to the section regarding satisfactory academic progress.

IUP Policy for Enrolled Students Called to Active Military Service

IUP provides two options for students who are currently enrolled but called to active military duty before the end of the semester:

Option 1

The student may choose to do a total semester withdrawal from all his/her classes and, under a State System of Higher Education policy, receive a full refund for tuition and fees; any university room and dining hall contract fees would be refunded on a prorated basis for the actual services the student has received up to the date of the withdrawal. This option requires that the student withdraw from every course and receive no grade for any course taken in that semester.

To process a total semester withdrawal, undergraduate students must contact the Office of the Student Advocate at the Student Success Center to complete the necessary paperwork to assign the course withdrawal designations and to start the process for refunds; graduate students must notify the School of Graduate Studies and Research, 101 Stright Hall, (www.iup.edu/graduatestudies).

Any student who has elected to use this option shall be granted re-enrollment for the next semester in which the student wishes to return to IUP. The student's academic standing at the time of re-enrollment shall remain as it was before the call to active military duty.

For federal student aid recipients, the return of Title IV student aid will be applicable. Students who previously received a refund from their Title IV federal aid awards, may have to return these funds to the university so that federal aid programs can be credited appropriately.

Option 2

If a substantial part of the semester (typically two-thirds to three-quarters of the semester) has been completed by the time the student is called for active military duty, he/she may meet with each instructor to determine an appropriate grade. Since assignment of grades is the responsibility of the instructor, he/she may assign whatever grade is appropriate. If the appropriate grade is an "incomplete," IUP will extend the deadline by which the

incomplete must be removed to 180 days from the time the student returns from active duty. Any university room and dining hall contract fees would be refunded on a prorated basis for the actual services the student has received up to the date of leaving the university for active duty

Undergraduate students must contact the Office of the Student Advocate at the Academic Success Center to complete the necessary paperwork to start the process for refunds; graduate students must notify the School of Graduate Studies and Research.

Any student who has elected to use Option 2 who wishes to return to IUP must apply for re-enrollment, which will be granted under this policy.

Questions may be addressed to the Office of the Registrar, 300 Clark Hall, (www.iup.edu/registrar).

Academic Standards Policy

1. **Purpose:** The university establishes minimum standards for cumulative grade point average (CGPA) to encourage academic accomplishment and timely progress toward graduation. This policy applies to all undergraduate students.
2. **Terminology**
 1. *Academic Good Standing:* Students maintaining a CGPA of at least 2.00 are in Academic Good Standing.
 2. *Probation:* Students whose CGPA falls below the 2.00 standard are on Probation during the next semester for which they are registered.
 3. *Extended Probation:* Students who have been authorized to continue, even though they have not achieved a 2.00 CGPA after one semester of probation, are on Extended Probation during the next semester for which they are registered.
 4. *Academic Recovery Plan:* Students whose CGPA falls below the 2.00 standard must develop an Academic Recovery Plan for achieving Academic Good Standing.
 5. *Academic Recovery Hold:* An Academic Recovery Hold is placed on the records of students who fail to submit an Academic Recovery Plan, preventing them from processing any registration transaction.
3. **Administrative Review and Enforcement of Standards**
 1. Each college, regional campus, and the Department of Developmental Studies will designate an Academic Standards officer who will be responsible for academic review and enforcement of standards.
 2. An academic review is conducted at the end of each semester.
 1. Students earning a 0.00 CGPA at the end of their first semester of enrollment will be dismissed from the university, except for students enrolled in only one course (up to 4 credits), who may be placed on probation at the discretion of the appropriate Academic Standards officer.
 2. Other students falling below the 2.00 CGPA standard will be placed on probation at the end of the semester. They may continue on probation for one semester. They will be required to develop and implement an Academic Recovery Plan.
 3. Students still below the 2.00 CGPA standard after a semester of probation are subject to dismissal. The Academic Standards officer may grant one semester of extended probation to those who (1) made progress toward Academic Good Standing while on probation or followed their approved Academic Recovery Plan and (2) have a reasonable mathematical chance of reaching a 2.00 CGPA after one additional semester. Other probation students will be dismissed.
 4. Students still below the 2.00 CGPA standard after a semester of extended probation will be dismissed.
 5. Students who regain Academic Good Standing but again fall below the 2.00 CGPA standard in a subsequent semester are permitted another semester of probation and, where appropriate, extended probation.
 6. Students who fail to establish an Academic Recovery Plan before the beginning of registration for the next semester will incur an Academic Recovery Hold preventing registration.
 7. Students referred by the Office of Admissions for first-year study at a regional campus may transition to the Indiana campus upon achieving 24 credits through two regular academic semesters at a 2.00 CGPA.
 8. Students admitted through the Department of Developmental Studies remain under the direction of the department for at least an academic year after initial enrollment and until reaching the 2.00 CGPA standard.
4. **Academic Recovery Plan:** Students not meeting the 2.00 CGPA standard must design and implement a comprehensive plan leading to Academic Good Standing. The plan must be developed with and approved by the appropriate Academic Standards officer (or designee).
 1. *Analysis:* Students must identify the factors contributing to their unsatisfactory achievement.
 2. *Planning:* Plans must include a schedule of minimum grades needed to achieve Academic Good Standing.
 3. *Commitment:* Students must commit to changes in behavior necessary to achieve academic success. This might include better time management, career exploration, and the use of such support services as academic advisors, tutoring, the Writing Center, the Counseling Center, the Department of Developmental Studies workshops on study skills and related activities, and any other opportunities deemed important by the Academic Standards officer (or designee).
 4. *Documentation:* Each plan must include an explanation of satisfactory methods of documentation. It is the student's responsibility to provide documentation supporting compliance with the agreed upon plan, if requested.

5. Re-enrollment

1. Students dismissed under this policy may not be readmitted for at least one calendar year.
2. Dismissed students may, after one calendar year, apply for readmission through the Office of the Registrar.
 1. A decision for readmission of a student in probationary or dismissed status, regardless of whether the student was dismissed by the university or the student voluntarily withdrew, is the responsibility of the Academic Standards officer of the college the student wishes to enter. If the student is seeking admission to a new college, the officer of the new college will consult with the officer of the former college before making a decision. The Office of the Registrar will officially change the major based on the Academic Standards officer's readmission letter to the student.
 2. A decision for readmission of a student enrolled at a regional campus at the time of dismissal or voluntary withdrawal, regardless of whether the student was dismissed by the university or the student voluntarily withdrew, is the responsibility of the Academic Standards officer of the regional campus.
 3. A decision for readmission of a student enrolled in the Department of Developmental Studies/Act 101 at the time of dismissal or voluntary withdrawal is the responsibility of the Developmental Studies Academic Standards officer.
3. Those students who, in the opinion of the appropriate Academic Standards officer, are likely to achieve academic success may be readmitted.
4. Students may be readmitted only once under this policy. Subsequent readmission may be available under the Canceled Semester Policy or the Fresh Start Policy.

IUP Student Grade Appeal Policy

Purpose

Grade Review and Grade Appeal are designed as means to resolve differences between students and faculty members related to grading.

Grade Review

A student may disagree with the instructor's professional evaluation of his or her work but have no grounds for making an appeal based on a claim of discrimination, capriciousness, and/or error as defined below. In these cases, the student should discuss the matter directly with the instructor and, if unsatisfied, with the chairperson of the department in which the course was offered and, if still unsatisfied, with the dean of the college in which the course was offered. If resolution does not occur during grade review, the decision of the instructor shall be final. If there is basis for claiming discrimination, capriciousness, and/or error, the student may proceed with a grade appeal.

Grade Appeal

If a student believes that an improper grade has been assigned, an appeal may be filed only on the following grounds:

1. **Discrimination:** On the basis of race, ethnicity, color, religion, national origin, sex, age, ancestry, disability, gender identity, sexual orientation, veteran status, or political affiliation.
2. **Capricious Evaluation:** Significant and unwarranted deviation from grading procedures and course outlines set at the beginning of the course (ordinarily in a written statement during the first week of the course) or grade assigned arbitrarily on the basis of whim or impulse. Disagreement with the instructor's professional evaluation is not sufficient by itself for a claim of capriciousness.
3. **Error:** Demonstrable, objective determination that a mathematical or clerical error resulted in the entry of an incorrect grade.

Procedures of Appeal

Level I: Informal Resolution

Every effort should be made to resolve the disagreement at Level I. Once a student has determined the proper grounds for appeal, he or she must first seek a resolution to the disagreement with the instructor either in person or in writing. If the student is not satisfied with the results, the student must then speak with the chairperson of the department that offers the course. If still unsatisfied, the student must discuss the matter with the dean of the

college that offers the course. A Student Government Association member may accompany and advise the student during the Level I procedures. Only after all attempts for resolution at Level I have been exhausted may the student initiate Level II.

Level II: Appeal Screening

1. **Composition:** Each year there shall be appointed a Grade Appeals Committee to determine the existence of the substantive basis for appeal. The committee will be composed of seven voting members: three faculty members appointed by APSCUF, three members elected by and from the Senate Academic Committee (one faculty, one administrator, one student), and one student appointed by the Student Government Association. A quorum consists of a majority of the committee. To take action, a majority of those present must be faculty members. If a quorum of the Level II committee is not available to meet within the designated time limits, the Office of the Provost will seek additional members from the appointing bodies. If these bodies are unable to respond in a timely manner, the Office of the Provost may select additional members from the appropriate groups.
2. **Procedure to Initiate Appeal:** To initiate Level II of the appeal, the student must file an appeal form with the Office of the Provost. This form must be filed within 60 calendar days of the beginning of the semester immediately following the semester in which the grade was received. The Office of the Provost may extend the 60-day limit only in unusual circumstances when equity demands it. (Note: Grade appeals will not generally be processed during the summer. Therefore, the appeal of any grade received in the spring or summer sessions normally will be processed in the fall. A review will be scheduled in the summer only when the student's academic eligibility is jeopardized by the grade in question or when the student is a graduating senior.) The Office of the Provost will notify the appropriate dean, department chairperson, instructor, APSCUF president, and the Student Government Association president of the student's initiation of the Level II process.
3. **Procedure to Process Appeal:** In addition to the appeal form, the student will be expected to submit pertinent information/documentation and rationale for his/her complaint, which will serve as supporting evidence. The faculty member instructor will be expected to submit in writing the course grading procedure and any other pertinent information. The director of Social Equity or designee will advise in appeals based on discrimination. Appeals based on capriciousness will be reviewed in light of the instructor's announced evaluation and grading system. The committee will review the materials to deny or confirm appeal continuation. Denial of appeal continuation must be by a negative vote of a majority of those present. This committee will immediately inform the Office of the Provost of its findings. Within five (5) class days of the receipt of the committee's report, the provost or designee will notify the student and the instructor of the findings. If the basis for appeal is determined to be substantive, the provost or designee will schedule a Level III Grade Appeal Panel within 15 class days to be convened before the conclusion of the semester.

Level III: Appeal Review

1. **Composition:** The Grade Appeal Panel will consist of five voting members: one academic dean or assistant/associate dean and four faculty members. The Student Government Association Executive Committee designee may advise as requested by the student. The director of Social Equity or designee will advise in appeals based on discrimination. The panel will be constituted from the Grade Appeal Pool by random selection. The panel chairperson will be elected by and from the panel before each review.
2. **Membership:** The Grade Appeal Pool will be established in the spring semester to serve for the following academic year. Using random selection methods, the pool will be established by the Office of the Provost. A pool of three deans or assistant/associate deans and 12 full-time faculty members will be maintained. To establish the membership for each appeal panel, before each appeal, the names of pool members will be supplied to all parties involved. A panel member must recuse him or herself if there is a conflict of interest. The student and the instructor each may eliminate only one dean or assistant/associate dean and two faculty members. The opportunity to disqualify panel members will take place only once. If through self-disqualification and challenges a panel cannot be constituted from the pool, then the Office of the Provost will supplement the pool using appropriate random selection methods.
3. **Procedure:**
 1. Both the student and the instructor will have the right to appear before the panel, present witnesses, and offer evidence. In addition to those specified in Level III, Section A, each may also bring one observer, with whom he or she may consult but who may not participate in the proceedings.
 2. The panel shall determine its rules of order for internal operation. After hearing the evidence brought forth, the panel will privately deliberate and render a decision. If the grade appeal is upheld, the Office of the Provost will assemble a committee of three appropriate faculty members (knowledgeable in the discipline but excluding the instructor against whom the complaint was lodged), who will review the student's work and recommend to the panel the appropriate grade or suitable remedy. The panel will incorporate this recommendation in its determination, which it then forwards to the Office of the Provost for implementation, ordinarily within 30 days. The Office of the Provost will initiate the processing of grade changes resulting from Level III decisions. The Office of the Provost will notify the student of grade changes resulting from Level III decisions.
 3. The written report sent to the Office of the Provost will state whether the student's appeal is upheld or denied; if upheld, the committee's evaluation and remedy will be included. Both the student and the instructor have the right to review all documents

related to the appeal. All documents supporting the report will be sealed and kept for one year to ensure the appropriate action is taken before they are destroyed or returned to the individual presenting the evidence.

4. The Level III decision is final for all involved parties.

Ancillary Provisions

1. **Amendment:** Amendments may be implemented upon concurrence by University Senate, APSCUF Representative Council, and Meet-and-Discuss. In the amendment process, specification of University Senate implies the Council of Trustees' role in approving Senate actions and recognizes the Council of Trustees' final action to change policy.
2. **Appeals on Procedural Grounds:** Decisions may not be challenged merely because the Office of the Provost fails to comply with Ancillary Provisions E, J, or I.
3. **Confidentiality:** Students, faculty, administrators, and staff involved in processing and hearing grade appeals must respect the confidentiality of all aspects of these proceedings. Those breaching confidentiality subject themselves to possible disciplinary action. This shall not abridge the First Amendment rights of the student appellant nor the instructor against whom the appeal has been filed.
4. **Continuing Rights:** This appeal does not supplant any legal rights afforded by the Commonwealth of Pennsylvania and/or the Government of the United States. Nothing in this policy abrogates or modifies any provisions of or rights under the Collective Bargaining Agreement.
5. **Discrimination:** Discrimination in this policy generally means unlawful discrimination. To the extent that any form of discrimination identified in this definition is not unlawful discrimination, this definition shall not be taken to create a cause of appeal against the university. In such cases, the final appeal procedures stated in this policy will be final and binding on the student.
6. **Dissemination of Grade Appeal Information:** The Office of the Provost will annually report to the university community a statistical summary of grade appeal data that does not compromise confidentiality, including (1) the number of appeals filed, (2) the resolutions at levels II and III, and (3) the final implementation of level III decisions.
7. **Faculty Compensation:** If a Level III Grade Appeal Panel (hearing) is scheduled at a time when any faculty member involved is not under contract, the faculty member will be compensated under terms mutually agreed upon at Meet-and-Discuss.
8. **Intended Purpose:** Unless there is intentional misrepresentation, the results of a grade appeal may not be used for disciplinary action of students or instructors.
9. **Intentional Misrepresentation:** Intentional misrepresentation in the filing of grade appeals by students will be referred to the university judicial system for students. Intentional misrepresentation by faculty instructors in the grade appeals process will be referred to the Office of the Provost.
10. **Support Mechanism:** The Office of the Provost, after consultation with the Senate Academic Committee and APSCUF, will be responsible for identifying a pool of at least 10 faculty members well versed in the preparation of grade appeals who will be available upon request to help students or faculty members prepare documentation for the grade appeals process.
11. **Tenure and Promotion Committee Membership on Grade Appeals Committees:** Members of the university-wide tenure and promotion committees may not serve concurrently on grade appeals committees.
12. **Training/Support:** Upon request, the Office of the Provost will offer information sessions/workshops to assist deans, chairs, grade appeals panel/committee members, and members of Student Government Association/university in identifying issues and to provide guidance for the resolution of grade appeals.

Academic Integrity Policy

IUP is committed to the fundamental values of academic integrity. Academic integrity means honesty and responsibility in scholarly endeavors and behaviors; it means that all academic work should be the result of an individual's own effort. Academic assignments help students learn and allow them to exhibit this learning. Grades are an assessment of the extent to which learning has been demonstrated in assignments. Therefore, academic work and grades should be the result of a student's own understanding and effort. All members of the IUP community—including students, faculty, and staff—are responsible for maintaining academic integrity, which includes knowing what IUP's academic integrity policies are and being able to identify academic misconduct. Academic misconduct includes any action which improperly impacts the assessment or representation of a student's academic achievement. Academic misconduct may result in disciplinary action, including expulsion from the University.

Types of Violations

Academic integrity violations can take many forms. Violations of IUP's standards of academic integrity include, *but are not limited to*, the following broadly defined categories:

1. **Plagiarism:** Plagiarism is a type of fraud that involves stealing someone else's work and lying about it. Using someone else's words, ideas, or data as if it were one's own work is plagiarism. Plagiarism applies to any type of source, whether published or unpublished, and to any type of assignment, whether written, verbal, or otherwise. Plagiarism can be avoided simply by acknowledging that certain material is the work of another, and then providing a citation that gives a reader the information necessary to find the source of the work. Any assignment submitted by a student that includes the words, ideas, or data of another must include complete, accurate, and specific references. Any verbatim statements must also include quotation marks. More information about what constitutes plagiarism and how to avoid it can be found online at the Office of the Provost website (www.iup.edu/academicintegrity).
2. **Fabrication:** Fabrication means making something up to deceive or mislead someone. This includes, but is not limited to, the use of fictitious data, research, citations, or any other kind of information. Fabrication also includes making false claims to influence testing or grading, or to gain academic credit. More information about what constitutes fabrication and how to avoid it can be found online at the Office of the Provost website.
3. **Cheating:** Cheating is an attempt to misrepresent one's mastery of information or skills being assessed. Cheating takes many forms; it includes, but is not limited to, using (or attempting to use) unauthorized materials, assistance, information, devices or study aids in any academic exercise. Cheating also includes, among other things, using the same paper or work more than once without authorization of the faculty member to whom the work is being submitted. More information about what constitutes cheating and how to avoid it can be found online at the Office of the Provost website.
4. **Technological Misconduct:** Computer dishonesty, as addressed by university computing policies, includes, but is not limited to, using or attempting to use computing accounts or other information for which the student is not authorized; providing false or misleading information to obtain a computing account or access to other information resources; attempting to obtain information resource access codes (usernames, passwords, PINs, etc.) for another user's computing accounts; sharing information resource access codes (usernames, passwords, PINs, etc.) with other individuals; attempting to disguise the identity of a computing account or other information resource; using or attempting to use university network resources to gain or attempt to gain unauthorized access to remote computers including, but not limited to, port scanning; violating the terms of intellectual property rights, in particular software license agreements and copyright laws; using information resources to monitor another user's data communications or to read, copy, change, or delete another user's files or software without permission of the owner; and using or installing or attempting to use or install software not properly licensed. More information about what constitutes technological misconduct and how to avoid it can be found online at the Office of the Provost website.
5. **Academic Dishonesty:** Academic dishonesty consists of any deceitful or unfair conduct relevant to a student's participation in a course or any other academic exercise or function. Academic dishonesty includes, but is not limited to: tampering with grades, any action that unfairly impacts the assessment of one's academic work, disrupting or interfering with the learning environment or the ability of others to complete academic assignments, intentionally evading IUP academic policies and procedures, or failure to comply with previously imposed sanctions for academic violations. Academic dishonesty also includes violations of student conduct policies, as related to the academic environment. A comprehensive discussion of IUP's policies and student behavior expectations has been compiled in, "*The Source: A Student Policy Guide*." Downloadable copies of "*The Source*" are available online at the Office of Student Support and Community Standards website (www.iup.edu/studentconduct).
6. **Facilitating Academic Integrity Violations:** Facilitating academic integrity violations includes attempting to help another engage in an academic integrity violation.
7. **Classroom Misconduct:** Conduct that significantly disrupts the learning process or is a threat to others.

The university reserves the right to discipline any student for the above policy violations and any other action that an ordinary, reasonable, college student knows, or should know, might lead to the issuance of discipline. This means the university maintains the right to issue discipline for reasonable cause.

Charges of academic integrity violations may be brought by a faculty member or administrator. Students who observe or become aware of a violation of academic integrity by another student are strongly encouraged to report it to a university official. A faculty member/administrator who believes that a student has violated an academic policy should resolve the matter by Documented Agreement or by Formal Adjudication. *Sanction(s) may not be imposed on a student believed to have violated an academic policy without following one of these procedures.*

If charges are brought, the accused student shall have a fair and reasonable opportunity to answer, explain, and defend himself or herself against the charges. The university shall have the burden of proof in all cases.

Options for Resolution

Once an academic integrity violation has been established a faculty member or administrator must use one of the following options to resolve the alleged violation.

1. Resolution by Documented Agreement

The faculty member/administrator will schedule a formal conference with the student in an attempt to reach a mutually agreeable resolution. This conference must be scheduled/requested within ten (10) calendar days of the observation or discovery of the alleged

violation absent unusual circumstances. If an agreement is reached, the faculty member/administrator must complete a Documented Agreement Referral form outlining the agreement and have it acknowledged by both parties: faculty member/administrator and student. The form is accessible online at MyIUP. If the violation pertains to work such as a thesis or comprehensive examination being judged or that has been judged by a committee, the conference must involve a majority of the committee, and the Documented Agreement Referral form must be agreed to by a majority of the committee and the student. Electronic copies of the form are distributed to the student, the faculty member/administrator filing the agreement, the department chair, the Office of the Provost, and the Office of Student Support and Community Standards. The form must be filed within 10 days of the conference.

By signing the Documented Agreement, the student waives any right to appeal the sanctions agreed upon and set forth in the Documented Agreement. If the student fails to fulfill the Documented Agreement, the faculty member/administrator may file an academic integrity referral against the student for noncompliance.

If a documented agreement is not reached, the faculty member/administrator shall initiate the formal adjudication process by filing an Academic Integrity Referral form with the department chair within 10 calendar days of the conference with the student.

If a previous academic integrity violation for the student is on record, the matter will be referred to an Academic Integrity Board.

2. **Resolution by Formal Adjudication**

A faculty member/administrator should pursue formal adjudication: (a) if he/she cannot reach, or chooses not to attempt, a Resolution by Documented Agreement with the student regarding the case or sanctions to be imposed; or (b) if the faculty member/administrator believes that the violation is so severe that it warrants sanctions such as: awarding a failing grade on a project or exam when resubmitting the project or retaking the exam is not possible; involuntary withdrawal from part of IUP's academic or other programs; suspension; expulsion; or rescission of a conferred degree.

The faculty member/administrator should file a Documented Agreement Referral form with the department chair within 10 calendar days of the observation or discovery of the violation or within 10 calendar days of the failure to reach a resolution through Resolution by Documented Agreement. If the violation pertains to work being judged by a committee, the form must be approved by a majority of the committee. The form will contain a description of the alleged violation, including the time, date, and place of occurrence, and the recommended sanction if the student is found to have violated this policy.

Academic Integrity Board (AIB)

The AIB *may be asked* to hear cases filed at the Resolution by Formal Adjudication level. In addition, the AIB will hear all cases in which appeals to the chair's decision are accepted by the provost/designee. The AIB will also review sanctions in cases of multiple violations.

For undergraduate hearings and reviews, the AIB will be made up of four (4) faculty members, one of whom will chair the board, and two (2) undergraduate students. For graduate-level hearings and reviews, the AIB will be made up of four (4) faculty members, one of whom will chair the board, and two (2) graduate students. A quorum requires the presence of four (4) people, at least one of whom must be an undergraduate student (for cases at the undergraduate level) or a graduate student (for cases at the graduate level). All members, including the chair, are voting members.

More information about the procedures for constituting an Academic Integrity Board can be found online at the Office of the Provost website (www.iup.edu/academicintegrity).

Appeals

These appeal procedures apply to cases resolved through formal adjudication. Cases of academic integrity that are resolved through Documented Agreement cannot be appealed.

If, after receiving the department chair's report on the outcome of the hearing, the faculty member/administrator or the student disagrees with the decision, the sanction, or both, he/she may appeal to the provost/designee in writing within ten (10) calendar days of receiving the report, for any of the following reasons, detailing the reason(s):

1. Denial of a fair and reasonable hearing
2. New evidence (applies when there is an acceptable reason why the information was not presented at the original hearing)
3. Excessively harsh sanctions

The provost/designee may deny the appeal or direct the appeal to be heard by an AIB within ten (10) calendar days. All appeals involving sanctions of involuntary withdrawal from part of IUP's academic or other programs, suspension, expulsion, or rescission of a degree will be heard by an AIB.

Unless the recommended sanction is suspension, expulsion, or rescission of a degree, the decision of the AIB is final and will be implemented by the provost/designee. Suspension, expulsion, or rescission of a degree may be recommended by the AIB but can only be implemented by the president/designee.

Multiple Violations

Information about prior violations is not relevant to determining whether a student violated the policy in the current case. The AIB may request information on prior violations only after determining that a violation has occurred. Information on prior violations may be used in determining the appropriate sanction.

If a student is found in violation of academic integrity two or more times, all materials within the student's past and present academic integrity files shall be used in determining appropriate sanctions. Students with multiple academic integrity violations of record may be subject to additional sanctions, including possible suspension or expulsion from the university.

For cases previously resolved by Documented Agreement or through formal adjudication at the department chair's level, an AIB hearing will be scheduled. This hearing will review all information pertinent to the determination of an appropriate sanction but will not reconsider the issue of whether the policy violation occurred. After considering the severity of the current and prior violations, the AIB may determine whether a more severe sanction is appropriate.

The AIB must submit a written report of the decision within ten (10) calendar days of its decision to the provost/designee, absent unusual circumstances, who will forward the decision to the involved parties.

The student may appeal any new sanction to the provost/designee under the appeal guidelines. The provost/designee may direct the appeal to be heard by a second AIB.

Sanctions

The following sanctions may be agreed upon by the student and faculty member/administrator through Documented Agreement. All grade reductions require the approval of the instructor of record. If the work is graded by a committee, a grade reduction requires the approval of the majority of the committee.

1. **Single Grade Reduction:** Reduction of grade or failure on project, examination, quiz, or other academic exercise on which the student is alleged to have cheated.
2. **Course Grade Reduction:** Reduction of course grade or failure in the course. If the violation involves a project spanning multiple courses (such as a dissertation or multiple semester internship), the grade reduction may apply to all courses involved.
3. **Constructive or Educational Task:** A task that requires the student to examine his/her dishonest behavior and that may benefit the student, campus, or community.
4. **Other:** Sanctions deemed appropriate and tailored to a specific violation as determined by the faculty member/administrator. Any reasonable sanction or combination of sanctions for a given violation may be agreed upon by the student and faculty member/administrator. In addition to the above, the following sanctions may be imposed through Formal Adjudication and/or AIB.
5. **Letter of Warning:** A warning letter may be issued indicating that the student has been found in violation of an academic policy and that failure to comply with policies in the future may result in further disciplinary action to be handled as a subsequent offense. The letter of warning will remain in effect for a period of time as specified by the individual or board hearing the case.
6. **Disciplinary Probation:** Disciplinary probation, which is for a period of time specified by the individual or board hearing the case, is an indication that a student's status at the university is seriously jeopardized. If the student is found in violation of another IUP policy during the probationary period, a more serious sanction will be levied, including possible involuntary withdrawal from part of IUP's academic or other programs, suspension, or expulsion from the university.
7. **Involuntary withdrawal from part of IUP's academic or other programs:** A student may be denied the right to participate in some IUP program(s). Such involuntary withdrawal might be imposed on either a temporary or permanent basis.
8. **Suspension:** A student may be suspended from the university for a specified period of time, not to be less than the remainder of the current semester. Suspension requires that a student remove himself/ herself from university premises, not attend classes or social activities, and not be present on university or Student Cooperative Association property during the period of suspension.
9. **Expulsion:** Expulsion may be considered under any of the following circumstances: when there is a very serious violation of the Academic Integrity Policy, when a student is proven to have violated the Academic Integrity Policy on more than one occasion, or when a student appears before the board after already having been suspended. Expulsion from the institution is permanent. Appeals to the sanction of

expulsion must be submitted to the Office of the President. Suspension, expulsion, and rescission of a degree can be recommended by a faculty member/administrator, department chair, and AIB but can be imposed only by the president/designee.

10. **Rescission of a degree:** A student may have his/her degree rescinded if found to have plagiarized or not to have conducted his/her own research on his/her thesis.

Questions concerning the Academic Integrity Policy and Procedures can be directed to the Office of the Provost. More information about Academic Integrity Procedures can be found online at the Office of the Provost website (www.iup.edu/academicintegrity).

Research Integrity Policy

IUP is committed to the highest ethical standards with regard to scholarship conducted by all members of the university community, including faculty, managers, administrators, staff, and students (both undergraduate and graduate). Therefore, it is imperative that all those engaged in research—including undergraduate students—be aware of and adhere strictly to established policies and procedures designed to respond to any allegations or apparent instances of fraud or misconduct related to research activities.

IUP will deal forthrightly with allegations of misconduct associated with research. The university will conduct an inquiry and, if warranted, an investigation of any possible misconduct by IUP faculty, managers, administrators, staff, and students conducting research. If misconduct is determined to have taken place, appropriate disciplinary action will be taken.

Additional policies are in place to protect research involving human subjects or animals and to ensure compliance with state and federal law.

Students engaged in research can find more information about IUP's research policies, procedures, training, and other resources at www.iup.edu/research/policies.

Final Examination Policies

The final examination week is part of the regular academic program and must be incorporated into each instructor's course plan for the semester. Final examinations are not the only legitimate type of terminating activity, and therefore, the instructor may choose an appropriate activity that conforms to course objectives.

The terminating activity shall take place only at the time and location assigned by the Office of the Registrar. Unless granted an excused absence, the faculty member responsible for the course must be present to direct the terminating activity. Faculty members may require student participation in the terminating activity.

Faculty members who do not schedule or do not attend the terminating activity for a course may be subject to disciplinary action commensurate with unexcused absences. Once the final examination has been set by the Office of the Registrar, changes and absences must be approved by the instructor's dean. Faculty members are only obligated to offer a makeup in cases where officially scheduled exams are in conflict. Where such conflicts exist during the examination period, the following general rules apply:

1. The higher-numbered course takes precedence. Thus, a student enrolled in GEOG 102 and ECON 325 would take the ECON 325 exam at the assigned time and the makeup in GEOG 102.
2. If courses in conflict are the same level and number, an alphabetical determination by full name of the department, not its acronym, will be made. For example, a student enrolled in MATH (Mathematics) 350 and MGMT (Management) 350 would take the MGMT 350 exam at the assigned time and a makeup in MATH 350.

Maximum Number of Exams on One Day/Conflicts

A student may not be required to take more than three final exams on any one regularly scheduled examination day. For any exam over three, a makeup exam must be scheduled by the instructor for the student, at his or her request, into another mutually agreeable regular final examination period. The rules determining conflict resolution (listed above) will determine which exam or exams a student may request as makeups.

Night Exam Policy

All tests, examinations, and quizzes should normally be administered during the prescribed course hours. Deviations to allow night exams for valid educational reasons, within the guidelines listed below, must be approved by the department and the dean. This policy does not include final exams. For more information on final exams, refer to the final exam policy.

Guidelines

1. Night exams can only be scheduled on Monday through Thursday evenings within the 6:00-10:00 p.m. time period.
2. Appropriate physical facilities must be arranged in advance without encroachment upon other authorized university functions.
3. If night exams are to be given, the day of the week on which they will be given must be listed in the course schedule on MyIUP before registration.
4. No night exam can take precedence over a regularly scheduled class.
5. Arrangements for nonpunitive makeup exams at a mutually agreeable time must be available for students who cannot attend the night exam.
6. For each hour of night exams, an hour of regularly scheduled class time will be canceled. Such cancellations are prohibited for two class days immediately preceding or immediately following holiday and/or vacation periods and/or semester terminations, as published in the academic calendar.

Class Disruptions

Students and faculty alike should strive to create a class environment that reflects mutual respect and the importance of learning. If a student's behavior disrupts that environment, the faculty member has a responsibility to seek resolution of the problem.

A faculty member is empowered to request that a student leave during a particular class period if, in the measured opinion of that faculty member, the student (1) significantly disrupts the learning process or (2) is a threat to others.

If the student refuses to leave or if the faculty member deems it appropriate, law enforcement officers may be called to remove the student. If the behavior is especially egregious or potentially harmful, or if the student refuses to modify the behavior, the faculty member may, with the consent of his/her academic dean and in consultation with the department chairperson, keep the student from returning to class until the case can be adjudicated under the Academic Integrity Policy. When appropriate, criminal charges should also be filed.

If deemed appropriate, the adjudicators may render a decision that removes the offending student from the class or the university. If so, the university will assign, in lieu of a grade, a designation that indicates a withdrawal. If grades are due before a final decision has been reached, the instructor should assign a temporary designation of "I" (Incomplete).

If the student is allowed to return, the student will have the option of reentering another open section of the course if feasible. When appropriate, the student should be allowed a reasonable opportunity to make up any work missed during the forced absence.

If a student's grade is adversely affected by a capricious forced absence, the student may file a grade appeal.

IT Acceptable Use Policy

Purpose: This policy addresses the use of information technology resources (IT resources) at Indiana University of Pennsylvania ("the university"). IT resources are intended to support the university's instructional, research, and administrative operations.

Scope: This policy applies to all users of IT resources owned or operated by Indiana University of Pennsylvania. Users include students, faculty, staff, contractors, and guest users of computer network resources, equipment, or connecting resources.

Objective: The objective of this policy is to create a framework to ensure that IT resources are used in an appropriate fashion and support the university's mission and institutional goals.

Policy: Use of the university's IT resources is a privilege and signifies agreement to comply with this policy. Users are expected to act responsibly and follow the university's policies and any applicable laws related to the use of IT resources. This policy provides regulations to ensure IT resources are allocated effectively.

While the university recognizes the role of privacy in an institution of higher learning and will endeavor to honor that ideal, there should be no expectation of privacy of information stored on or sent through university-owned IT resources, except as required by law. For example, the university may be required to provide information stored in IT resources to someone other than the user as a result of court order, investigatory process, or in response to a request authorized under Pennsylvania's Right-to-Know statute (65 P.S. §67.101 et seq.). Information stored by the university may also be viewed by technical staff working to resolve technical issues.

Definitions: For the purposes of the IUP Acceptable Use of IT Resources Policy (AUP), IT resources include the University computer network, all University-owned devices and all University provided software systems regardless of what computer network is being used. This is inclusive of all content transmitted over the University computer network by any device regardless of ownership.

The National Institute of Standards and Technology (NIST) defines Personally Identifiable Information (PII) as any information about an individual, including (1) any information that can be used to distinguish or trace an individual's identity, such as name, social security number, date and place of birth, mother's maiden name, or biometric medical, educational, financial, and employment information.

Responsibilities of Users of IT Resources:

- Respect the intellectual property of authors, contributors, and publishers in all media.
- Protect user identification, password information, and the system from unauthorized use.
- Adhere to the terms of software licenses and other contracts. Persons loading software on any university computer must adhere to all licensing requirements for the software. Except where allowed by university site licenses, the copying of university-licensed software for personal use is a violation of this policy.
- Comply with federal, state, and local laws, relevant university personal conduct regulations, and the terms and conditions of applicable collective bargaining agreements. Applicable laws include, but are not limited to, those regulating copyright infringement, copyright fair use, libel, slander, and harassment.
- Become acquainted with laws, licensing, contracts, and university policies and regulations applicable to the appropriate use of IT resources. Users are expected to use good judgment and exercise civility at all times when utilizing IT resources and respect the large, diverse community utilizing these resources in a shared manner.
- Understand the appropriate use of assigned IT resources, including the computer, network address or port, software, and hardware.
- Comply with the university's Use of E-mail as an Official Means of Communication Policy. Electronic mail should never be considered an appropriate tool for confidential communication. Messages can be forwarded or printed, and some users permit others to review their e-mail accounts. Message content can be revealed as part of legal proceedings. Finally, messages are sometimes not successfully delivered due to a technical issue requiring authorized IT personnel to review message content as part of the troubleshooting process.
- Protect Personally Identifiable Information (PII) on IUP's network by only storing sensitive information when necessary on university drives and adhering to best practices for the proper storage.

Prohibited Uses of IT Resources:

- Providing false or misleading information to obtain or use a university computing account or other IT resources
- Unauthorized use of another user's account and attempting to capture or guess passwords of another user
- Attempting to gain or gaining unauthorized access to IT resources or to the files of another user. Attempting to access restricted portions of the network, an operating system, security software, or other administrative applications without authorization by the system owner or administrator
- Interfering with the normal operation, proper functioning, security mechanisms, or integrity of IT resources
- Use of IT resources to transmit abusive, threatening, or harassing material or other communications prohibited by law
- Copyright infringement, including illegal sharing of video, audio, software, or data
- Excessive use that overburdens or degrades the performance of IT resources to the exclusion of other users. This includes activities which unfairly deprive other users of access to IT resources or which impose a burden on the university. Users must be considerate when utilizing IT resources. The university reserves the right to set limits on a user through quotas, time limits, and/or other mechanisms.
- Intentionally or knowingly installing, executing, or providing to another a program or file on any of the IT resources that could result in damage to any file, system, or network. This includes, but is not limited to, computer viruses, trojan horses, worms, spyware, or other malicious programs or files.

Procedures: Violations of this policy will be reported to appropriate levels of administrative oversight, depending on the statutes and policies violated. Suspected violations of federal and state statutes and local ordinances shall be reported to the director of Public Safety (chief of campus police) for official action.

Nonstatutory violations of the Acceptable Use Policy, such as "excessive use," may be reported to the chief information officer, the associate vice president for Human Resources, the Office of Student Support and Community Standards, and/or the director of Public Safety (chief of campus police).

A university employee or student who violates this policy risks a range of sanctions imposed by relevant university disciplinary processes, including denial of access to any or all IT resources. He or she also risks referral for prosecution under applicable local, state, or federal laws.

The University Senate-via the Library and Educational Services Committee-is responsible for recommending the university's Acceptable Use Policy. Questions regarding the applicability, violation of the policy, or appropriate access to information should be referred to the chief information officer.

Use of IUP E-mail as an Official Means of Communications

Purpose: The purpose of this policy is to define IUP e-mail as an official method of communication for the university.

Scope: This policy applies to all students and employees except those employees who do not normally have access to e-mail.

Objective: The objective of this policy is to define the use of IUP e-mail as an official method of communication and the responsibility of e-mail users to monitor, read, and use their IUP e-mail accounts. As the IUP e-mail system provides a recognized method to authenticate the user, it is suitable to use for official communications.

Policy: Indiana University of Pennsylvania provides e-mail services to all students and employees as an official method of communication. Students and employees (except those employees who do not normally have access to e-mail) have a responsibility to read their IUP e-mail accounts and, if responding to or sending e-mail about IUP business, use their IUP e-mail accounts to do so.

Definitions: *E-mail user* is defined as any student or employee who has been issued an IUP e-mail account. *E-mail account* is an active IUP e-mail (@iup.edu). *E-mail spoofing* is the creation of e-mail messages with a forged sender address.

Responsibilities: Users are expected to check their e-mail accounts regularly and to use their IUP e-mail accounts when responding to or sending e-mail to IUP employees and students about IUP academic and administrative matters.

Procedures: The rationale for this policy is that for faculty members who wish to use IUP e-mail for communication to and from students, there is a policy that states that this is approved. Faculty members can put this policy in their syllabi and other documents. Communicating via the IUP e-mail system facilitates determining the identity of the sender. Users are therefore not permitted to impersonate other users by modifying e-mail header information for the purpose of deception. All forms of e-mail spoofing are prohibited.

Where applicable, academic and administrative offices should publish e-mail addresses that can be used to receive such e-mail. Faculty members should make students aware of their e-mail address by including it on their syllabi or by other means.

Visiting Student Program Policy

1. Purpose

1. To facilitate undergraduate student enrollment at institutions of Pennsylvania's State System of Higher Education to take advantage of courses available across the System, without loss of institutional residency, eligibility for honors or athletics, or credits toward graduation at the home institution.

2. Undergraduate Student Standards

1. The student must be matriculated at the home university with a minimum of 12 college-level credits and be in good academic standing.
2. Students may take a maximum of 24 credits via the Visiting Student Policy.
3. The student who presents evidence of good standing at the home university will be allowed to register for courses at other State System universities. The visiting student priority level for registration will be determined by each university.
4. All credits and grades accrued at other System universities shall be accepted in full by the home university and thereafter treated as home university credits, residency, and grades.
 1. It is the responsibility of the student to work with the student's advisor at the home institution regarding applicability of credits toward graduation requirements at the home institution consistent with State System procedures.
 2. It is the responsibility of the student to complete the Visiting Student Notification form and submit to the home institution prior to enrolling in courses at another State System institution.
 3. Students cannot use the Visiting Student Program to repeat courses. Students cannot use the Visiting Student Program for internship or practica that are required for licensure or certification without the express written permission of their appropriate university officials at the home university and placement availability at the requested institution.

5. The student shall register at, and pay tuition and fees to, the State System university visited. A student wishing to divide a course load between two institutions during the same term shall register and pay appropriate tuition and fees at both universities.
6. The Office of the Chancellor will work with universities to establish and publish procedures to identify visiting students such that financial aid, residency, eligibility for honors, eligibility of athletics, and credits to graduation are assured.

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Academic Standards Policy

1. **Purpose:** The university establishes minimum standards for cumulative grade point average (CGPA) to encourage academic accomplishment and timely progress toward graduation. This policy applies to all undergraduate students.

2. Terminology

1. *Academic Good Standing:* Students maintaining a CGPA of at least 2.00 are in Academic Good Standing.
2. *Probation:* Students whose CGPA falls below the 2.00 standard are on Probation during the next semester for which they are registered.
3. *Extended Probation:* Students who have been authorized to continue, even though they have not achieved a 2.00 CGPA after one semester of probation, are on Extended Probation during the next semester for which they are registered.
4. *Academic Recovery Plan:* Students whose CGPA falls below the 2.00 standard must develop an Academic Recovery Plan for achieving Academic Good Standing.
5. *Academic Recovery Hold:* An Academic Recovery Hold is placed on the records of students who fail to submit an Academic Recovery Plan, preventing them from processing any registration transaction.

3. Administrative Review and Enforcement of Standards

1. Each college, regional campus, and the Department of Developmental Studies will designate an Academic Standards officer who will be responsible for academic review and enforcement of standards.
2. An academic review is conducted at the end of each semester.
 1. Students earning a 0.00 CGPA at the end of their first semester of enrollment will be dismissed from the university, except for students enrolled in only one course (up to 4 credits), who may be placed on probation at the discretion of the appropriate Academic Standards officer.
 2. Other students falling below the 2.00 CGPA standard will be placed on probation at the end of the semester. They may continue on probation for one semester. They will be required to develop and implement an Academic Recovery Plan.
 3. Students still below the 2.00 CGPA standard after a semester of probation are subject to dismissal. The Academic Standards officer may grant one semester of extended probation to those who (1) made progress toward Academic

Good Standing while on probation or followed their approved Academic Recovery Plan and (2) have a reasonable mathematical chance of reaching a 2.00 CGPA after one additional semester. Other probation students will be dismissed.

4. Students still below the 2.00 CGPA standard after a semester of extended probation will be dismissed.
 5. Students who regain Academic Good Standing but again fall below the 2.00 CGPA standard in a subsequent semester are permitted another semester of probation and, where appropriate, extended probation.
 6. Students who fail to establish an Academic Recovery Plan before the beginning of registration for the next semester will incur an Academic Recovery Hold preventing registration.
 7. Students referred by the Office of Admissions for first-year study at a regional campus may transition to the Indiana campus upon achieving 24 credits through two regular academic semesters at a 2.00 CGPA.
 8. Students admitted through the Department of Developmental Studies remain under the direction of the department for at least an academic year after initial enrollment and until reaching the 2.00 CGPA standard.
4. **Academic Recovery Plan:** Students not meeting the 2.00 CGPA standard must design and implement a comprehensive plan leading to Academic Good Standing. The plan must be developed with and approved by the appropriate Academic Standards officer (or designee).
1. *Analysis:* Students must identify the factors contributing to their unsatisfactory achievement.
 2. *Planning:* Plans must include a schedule of minimum grades needed to achieve Academic Good Standing.
 3. *Commitment:* Students must commit to changes in behavior necessary to achieve academic success. This might include better time management, career exploration, and the use of such support services as academic advisors, tutoring, the Writing Center, the Counseling Center, the Department of Developmental Studies workshops on study skills and related activities, and any other opportunities deemed important by the Academic Standards officer (or designee).
 4. *Documentation:* Each plan must include an explanation of satisfactory methods of documentation. It is the student's responsibility to provide documentation supporting compliance with the agreed upon plan, if requested.
5. **Reenrollment**
1. Students dismissed under this policy may not be reenrolled for at least one calendar year.
 2. Dismissed students may, after one calendar year, apply for reenrollment through the Office of the Registrar.
 1. A decision for reenrollment of a student in probationary or dismissed status, regardless of whether the student was dismissed by the university or the student voluntarily withdrew, is the responsibility of the Academic Standards officer of the college the student wishes to enter. If the student is seeking admission to a new college, the officer of the new college will consult with the officer of the former college before making a decision. The Office of the Registrar will officially change the major based on the Academic Standards officer's reenrollment letter to the student.
 2. A decision for reenrollment of a student enrolled at a regional campus at the time of dismissal or voluntary withdrawal, regardless of whether the student was dismissed by the university or the student voluntarily withdrew, is the responsibility of the Academic Standards officer of the regional campus.
 3. A decision for reenrollment of a student enrolled in the Department of Developmental Studies/Act 101 at the time of dismissal or voluntary withdrawal is the responsibility of the Developmental Studies Academic Standards officer.
 3. Those students who, in the opinion of the appropriate Academic Standards officer, are likely to achieve academic success may be reenrolled.
 4. Students may be reenrolled only once under this policy. Subsequent reenrollment may be available under the Canceled Semester Policy or the Fresh Start Policy.

Academic Integrity Policy

IUP is committed to the fundamental values of academic integrity. Academic integrity means honesty and responsibility in scholarly endeavors and behaviors; it means that all academic work should be the result of an individual's own effort. Academic assignments help students learn and allow them to exhibit this learning. Grades are an assessment of the extent to which learning has been demonstrated in assignments. Therefore, academic work and grades should be the result of a student's own understanding and effort. All members of the IUP community—including students, faculty, and staff—are responsible for maintaining academic integrity, which includes knowing what IUP's academic integrity policies are and being able to identify academic misconduct. Academic misconduct includes any action which improperly impacts the assessment or representation of a student's academic achievement. Academic misconduct may result in disciplinary action, including expulsion from the University.

- Violations
- Referrals for Alleged Violation
- Conduct of Proceedings
- Resolution by Formal Adjudication
- Sanctions
- Appeal Procedures

Violations

Academic integrity violations can take many forms. Violations of IUP's standards of academic integrity include, *but are not limited to*, the following broadly defined categories:

1. **Plagiarism:** Plagiarism is a type of fraud that involves stealing someone else's work and lying about it. Using someone else's words, ideas, or data as if it were one's own work is plagiarism. Plagiarism applies to any type of source, whether published or unpublished, and to any type of assignment, whether written, verbal, or otherwise. Plagiarism can be avoided simply by acknowledging that certain material is the work of another, and then providing a citation that gives a reader the information necessary to find the source of the work. Any assignment submitted by a student that includes the words, ideas, or data of another must include complete, accurate, and specific references. Any verbatim statements must also include quotation marks. More information about what constitutes plagiarism and how to avoid it can be found online at the Office of the Provost website (www.iup.edu/academicintegrity).
2. **Fabrication:** Fabrication means making something up to deceive or mislead someone. This includes, but is not limited to, the use of fictitious data, research, citations, or any other kind of information. Fabrication also includes making false claims to influence testing or grading, or to gain academic credit. More information about what constitutes fabrication and how to avoid it can be found online at the Office of the Provost website.
3. **Cheating:** Cheating is an attempt to misrepresent one's mastery of information or skills being assessed. Cheating takes many forms; it includes, but is not limited to, using (or attempting to use) unauthorized materials, assistance, information, devices or study aids in any academic exercise. Cheating also includes, among other things, using the same paper or work more than once without authorization of the faculty member to whom the work is being submitted. More information about what constitutes cheating and how to avoid it can be found online at the Office of the Provost website.
4. **Technological Misconduct:** Computer dishonesty, as addressed by university computing policies, includes, but is not limited to, using or attempting to use computing accounts or other information for which the student is not authorized; providing false or misleading information to obtain a computing account or access to other information resources; attempting to obtain information resource access codes (usernames, passwords, PINs, etc.) for another user's computing accounts; sharing information resource access codes (usernames, passwords, PINs, etc.) with other individuals; attempting to disguise the identity of a computing account or other information resource; using or attempting to use university network resources to gain or attempt to gain unauthorized access to remote computers including, but not limited to, port scanning; violating the terms of intellectual property rights, in particular software license agreements and copyright laws; using information resources to monitor another user's data communications or to read, copy, change, or delete another user's files or software without permission of the owner; and using or installing or attempting to use or install software not properly licensed. More information about what constitutes technological misconduct and how to avoid it can be found online at the Office of the Provost website.
5. **Academic Dishonesty:** Academic dishonesty consists of any deceitful or unfair conduct relevant to a student's participation in a course or any other academic exercise or function. Academic dishonesty includes, but is not limited to: tampering with grades, any action that unfairly impacts the assessment of one's academic work, disrupting or interfering with the learning environment or the ability of others to complete academic assignments, intentionally evading IUP academic policies and procedures, or failure to comply with previously imposed sanctions for academic violations. Academic dishonesty may also include violation of the Code of Student Conduct. A comprehensive discussion of IUP's policies and student behavior expectations can be found on the Office of Student Support and Community Standards website (www.iup.edu/studentconduct).
6. **Facilitating Academic Integrity Violations:** Facilitating academic integrity violations includes attempting to help another engage in an academic integrity violation.
7. **Classroom Misconduct:** Conduct that significantly disrupts the learning process or is a threat to others.
8. **Out-of-Classroom Misconduct:** Behavior that is unethical or hazardous in IUP- sponsored professional experience activities, such as internship, clinical, student training, practicum, and service learning, or other out-of classroom experiences
9. **Noncompliance:** Noncompliant behavior includes failure to fulfill any sanction levied as a result of an academic integrity proceeding.

Referrals for Alleged Violation

Charges of academic integrity violations may be brought by a faculty member or administrator. Students who observe or become aware of a violation of academic integrity by another student are strongly encouraged to report it to a faculty member or administrator.

If, after reviewing the referral, the Office of the Provost determines the alleged behavior needs to be referred to another office, the Office of the Provost will share all pertinent information with the appropriate office.

Conduct of Proceedings

1. If charges are brought, an accused student shall have an opportunity to answer, explain, and defend themselves against the charges in accordance with the procedures below.
2. The university shall have the burden of proof of establishing violations based on evidence to make a reasonable person believe a fact sought to be proved is more likely true than not.
3. All formal records pertaining to academic integrity will remain confidential to the greatest extent possible.
4. All references to days in this policy refer to calendar days.
5. Sequential processing of an alleged academic integrity violation through the following resolution processes is not required.

Resolution by Documented Agreement with the Faculty Member/Administrator

1. If the faculty member/administrator does not believe that the violation is so severe that it warrants sanctions such as disciplinary probation, involuntary withdrawal from part of IUP's academic or other programs, suspension, expulsion, or rescission of a conferred degree, the faculty member/administrator may seek to resolve the matter by Documented Agreement. (Note: If the faculty member/administrator does believe that the violation is so severe that it warrants sanctions such as disciplinary probation, involuntary withdrawal from part of IUP's academic or other programs, suspension, expulsion, or rescission of a conferred degree, the faculty member/administrator may seek to resolve the matter directly through formal adjudication, such as Hearing by Department Chair or Hearing by AIB.)

The faculty member/administrator will schedule a timely formal conference with the student to reach a mutually agreeable resolution. This conference should be requested within ten (10) days of the observation or discovery of the alleged violation absent unusual circumstances. Absent unusual circumstances, a conference should be held within ten (10) days of request, an agreement should be reached within ten (10) days of conference, and if no agreement is reached within then (10) days of conference, the alleged violation will be resolved through formal adjudication. If the violation pertains to work being judged or that has been judged by a committee, such as a thesis or comprehensive examination, the conference must involve a majority of the committee.

2. If an agreement is reached, a Documented Agreement Referral form available online at MyIUP must be completed and acknowledge in writing by all required parties within ten (10) days of the conference. Electronic copies of the form must be distributed to all signatories to the agreement and Office of the Provost. If the violation pertains to work being judged or that has been judged by a committee such as a thesis or comprehensive examination, the Documented Agreement Referral form must be agreed to by a majority of the committee and the student. In all other cases, the faculty member/administrator and student must acknowledge the agreement
3. By signing the Documented Agreement, the student waives any right to appeal the sanctions agreed upon and set forth in the Documented Agreement. If the student fails to fulfill the terms of the Documented Agreement, the faculty member/administrator may file an academic integrity referral against the student for noncompliance within ten (10) days of discovery of said failure.
4. If the parties are unsuccessful at reaching a Documented Agreement, the faculty member/administrator/student will pursue formal adjudication. The student will have input as to the path for formal adjudication (i.e., hearing by Department Chair or Hearing by AIB).

Resolution by Formal Adjudication

Formal adjudication will be pursued if:

- The faculty member/administrator and student are unable to reach a resolution by Documented Agreement;
- The faculty member/administrator believes that the violation is so severe that it warrants a sanction that includes disciplinary probation, involuntary withdrawal from part of IUP's academic or other programs, suspension, expulsion, or rescission of a conferred degree (Note: in this instance, a faculty member/administrator does not have to initiate resolution of the alleged violation first through Documented Agreement); and/or
- A student desires formal adjudication and not a Documented Agreement to resolve the alleged academic integrity violation.

A formal adjudication is initiated by the faculty member/administrator filing an Academic Integrity Referral form and may take the form of a hearing by the department chair and/or a hearing conducted by an Academic Integrity Board (AIB). If the student desires formal adjudication, the faculty

member/administrator will initiate a formal adjudication by filling out an Academic Integrity Form indicating the student's request and path for adjudication. If there is no indication of which formal adjudication path has been requested, the Office of the Provost will initiate discussion with the student regarding preferred path.

1. **Hearing by Department Chair**

- The faculty member/administrator and the student may agree to have the matter adjudicated by a hearing by department chair. The Academic Integrity Referral form should include a statement the parties agree to have the matter adjudicated by a hearing by department chair and should be filed within ten (10) days of the parties' failure to reach a resolution through Documented Agreement. A copy of the Academic Integrity Referral form will be sent to the referring party and the student.
- If the faculty member/administrator had decided to take the matter directly to a hearing by department chair due to the seriousness of the alleged violations without first using the Documented Agreement process, the faculty member/administrator will complete the Academic Integrity Referral form and forward it to the department chair. A copy of the Academic Integrity Referral form will be sent to the referring party and the student.
- Despite the wishes of the referring party and the student, the matter may be referred directly to an AIB if:
 - The department chair believes the circumstances and the severity of the alleged would result in a recommended sanction of suspension, expulsion or rescission of degree if true or if the department chair otherwise believes the violation warrants Hearing by AIB; or
 - The department chair feels he/she is unable to provide an unbiased/impartial opportunity for a hearing.
- If the department chair elects to send the violation directly to the AIB, the department chair should forward the Academic Integrity Referral form to the Office of the Provost within ten (10) days of receiving the form from the faculty member/administrator.
- The department chair will schedule a hearing within ten (10) days of receipt of the referral absent extenuating circumstances. The student accused must be give at least three (3) days advance written notice of the hearing to allow the student a reasonable time to prepare a defense. The student may waive this notice requirement.
- The student and the faculty member/administrator must be given the opportunity to submit and review written, physical, and testimonial evidence and to question witnesses at the hearing.
- The student and faculty member/administrator have the right to bring an advisor to the hearing. Advisors may only consult privately with the faculty member/administrator or student.
- Following the hearing, the department chair will render a determination based on the information presented at the hearing. Within ten (10) days of the hearing, absent extenuating circumstances, the department chair will send a written report of the hearing to the Office of the Provost with copies to the faculty member/administrator and the student summarizing the outcome, the factual basis for the determination reached, and if violation is found, recommending sanctions to be imposed and appeal procedures.
- If the sanctions include suspension, expulsion, or rescission of a degree, the matter will be referred to the Provost/designee for review.
- The student has the right to appeal the department chair's decision and/ or sanctions through the Office of the Provost as outlined in the appeal procedure.

2. **Hearing by Academic Integrity Board:**

- A hearing before the AIB will occur if:
 - The faculty member/administrator feels the alleged violation is egregious enough to warrant sanctions including suspension or expulsion.
 - The faculty member/administrator and the student do not agree to have the matter adjudicated by a hearing by department chair;
 - The department chair refers the matter to an AIB without conducting a hearing;
 - The student has previous violations on record. In this case, the AIB will determine if additional sanctioning is warranted due to multiple academic integrity violations.
- The AIB will schedule a hearing within ten (10) days of receipt of the referral absent extenuating circumstances to allow the student a reasonable time to prepare a defense. The student accused must be given at least three (3) days advance written notice of the hearing to allow the student a reasonable time to prepare a defense. The student may waive this notice requirement.
- The student and the faculty member/administrator must be given the opportunity to submit and review written, physical, and testimonial evidence and to question witnesses at the hearing.
- The student and faculty member/administrator have the right to bring an advisor to the hearing or the review. Advisors may only consult privately with the faculty member/administrator or student.
- Following a hearing, the AIB will render a determination based on the information presented at the hearing. Within ten (10) days of the hearing, absent extenuating circumstances, the chair will send a written report of the hearing of the Office of the Provost with copies to the faculty member/administrator and the student summarizing the outcome, the factual basis for the determination reached, and if a violation is found, sanctions to be imposed and appeal procedures.
- If the Sanctions include suspension, expulsion, or rescission of a degree, the matter will be referred to the Provost/designee for review.
- The student has the right to appeal the AIB's decision and/ or sanctions.

3. **Composition of an AIB**

- For undergraduate hearings and reviews, and AIB will be made up of four (4) faculty members and two (2) undergraduate students. All members, including the chair, are voting members.
- For graduate-level hearings and reviews involving undergraduate students taking graduate level courses, refer to the Graduate School's policy on AIB composition.
- For any case heard or reviewed, at least four AIB members must be available, at least one of whom must be a student, preferably an undergraduate student if the accused is an undergraduate student. A faculty member will chair all hearings and reviews.
- Selection of members to a specific AIB will avoid conflicts of interest with the student (e.g., AIB member being from the student's department). A board member may recuse themselves or be recused upon the request of the accused student/referring party if there is a perceived conflict of interest.

Sanctions

1. **Sanctions Imposed through Documented Agreement**

The following sanctions may be agreed upon by the student and faculty member/administrator through Documented Agreement and can be faculty/administrator imposed. All grade reductions require the approval of the instructor of record. If the work is graded by a committee, a grade reduction requires the approval of the majority of the committee.

- **Single Grade Reduction:** Reduction of a grade or failure on project, examination, quiz or other academic exercise on which the student is alleged to have cheated.
- **Course Grade Reduction:** Reduction of course grade or failure in the course. If the violation involves a project spanning multiple courses (such as a dissertation or multiple-semester internship), the grade reduction may apply to all courses involved.
- **Constructive or Educational Task:** A task that requires students to examine their dishonest behavior and that may benefit the student, campus, or community.
- **Letter of Reprimand:** A reprimand letter may be issued indicating that the student has been found in violation of an academic policy and that failure to comply with policies in the future may result in further disciplinary action to be handled as a subsequent offense. The letter of reprimand will remain in effect for the period of time specified by the individual or board hearing the case.
- **Other:** Sanctions deemed appropriate and tailored to a specific violation as agreed to by the student and faculty member/administrator.

2. **Sanctions Imposed through Formal Adjudication**

In addition to the above, the following sanctions may result from a Hearing by Department Chair and /or AIB:

- **Disciplinary Probation:** Disciplinary probation, which is for the period of time specified by the individual or board hearing the case, is an indication that a student's status at the university is seriously jeopardized. If the student is found in violation of another IUP policy during the probationary period, a more serious sanction will be levied, which may include involuntary withdrawal from part of IUP's academic or other programs, suspension, or expulsion from the university.
- **Involuntary Withdrawal from Part of IUP's Academic or Other Programs:** A student may be denied the right to participate in some IUP programs(s). Such involuntary withdrawal might be imposed on either a temporary or permanent basis.
- **Suspension:** A student may be suspended from the university for a specified period of time, not to be less than the remainder of the current semester. Suspension requires that students remove themselves from university premises, not attend classes or social activities, and not be present on university property (including residence halls) or Student Cooperative Association property during the period of suspension.
- **Expulsion:** Expulsion may be considered under any of the following circumstances: when there is a very serious violation of the Academic Integrity Policy, When a student is proven to have violated the Academic Integrity Policy on more than one occasion, or when a student appears before the board after already having been suspended. Expulsion from the institution is permanent. Appeals to the sanction of expulsion must be submitted to the Office of the President.
- **Rescission of a Degree:** Students may have their degree rescinded if found to have plagiarized or not to have conducted their research on their thesis.

Sanctions of expulsion and/or rescission of a degree can be recommended by a Department Chair of AIB but can only be imposed by the President/designee. A sanction of suspension can be imposed by the Provost/designee.

3. **Previous Violations**

Information about prior violations will not be used to determine whether a student violated the policy in the current case. Information on prior violations will only be used in determining the appropriate sanction. Students with multiple academic integrity violations on record may be subject to additional sanctions, including suspension or expulsion from the university. A student who has had previous violations on record will be heard by an AIB to determine if additional sanctioning is warranted.

Appeal Procedures

1. Written appeals of a Department Chair's or AIB's hearing decision or sanction may be filed by a student within ten (10) days of receiving the report and are limited to the following grounds:
 - Denial of a fair and reasonable hearing (e.g., procedural errors that likely impacted hearing outcome).
 - New evidence (applies when there is an acceptable reason why the information was not presented at the original hearing).
 - Excessively harsh sanctions.
2. All appeals of expulsion or degree rescission must be submitted to the office of the President. All other appeals must be submitted to the Office of the Provost.
3. The ten (10) day requirement may be waived where extenuating circumstances prevail and only if the grounds for appeal are met.
4. The person submitting the appeal must include in the written appeal the reason(s) for the appeal, the supporting facts, and the requested solution. Appeals will not be accepted by third parties on behalf of the party appealing the decision. The appeal must include the signature of the person submitting the appeal. An appeal is not a rehearing of the matter and will not have merit simply because the person submitting the appeal disagrees with the outcome.
5. In the case of an appeal of expulsion or degree rescission, the Provost/designee, or the President/designee in the case of an appeal of expulsion or degree rescission, will issue a decision on all appeals from an AIB report or review within ten (10) days absent extenuation circumstances. The appeal may be sustained, denied, sanctions may be modified, or the matter may be referred for a new hearing.

Operational Notes

1. In cases where a violation is alleged at, or near, the end of the semester and resolution by Documented Agreement or Formal Adjudication cannot be completed before grades are submitted, the faculty member should submit a grade of "Incomplete" (I) for the student. The faculty member must initiate formal notification of the academic integrity violation to the student. The "I" grade will remain on the student's record until the case has been resolved. Once the case has been resolved, the "I" grade will be replaced with the appropriate grade.
2. If the violation is alleged during the semester when classes are in session, the accused student should continue attending all classes and continue to complete course requirements while the academic integrity case is pending.
3. Conversion of a Withdrawal: Individual course withdrawal initiated by a student before resolution of an academic integrity case will not remain on the transcript if the student is found to have violated the policy and the resolution of the referral is the assignment of a grade. If the student has withdrawn and has been found to have violated this policy, another grade, including an "F", may be placed on the transcript. If the student has withdrawn and has not been found to have violated this policy, the "W" will remain on the transcript.
4. The 10-day time frame within the policy is a period of time violation intended to reasonably ensure a swift response. A faculty member/administrator, student, or Provost/designee may request an extension of time for good cause (e.g., alleged violation occurring at the end of the semester or during summer or winter session/break); this extension may be granted by the Provost/designee.
5. The university may withhold transcripts, grades, and diplomas or take other appropriate actions necessary to preserve its ability to enforce its rules.

Questions concerning the Academic Integrity Policy and Procedures can be directed to the Office of the Provost. More information about Academic Integrity Procedures can be found online at the Office of the Provost website (www.iup.edu/academicintegrity).

Research Integrity Policy

IUP is committed to the highest ethical standards with regard to scholarship conducted by all members of the university community, including faculty, managers, administrators, staff, and students (both undergraduate and graduate). Therefore, it is imperative that all those engaged in research—including undergraduate students—be aware of and adhere strictly to established policies and procedures designed to respond to any allegations or apparent instances of fraud or misconduct related to research activities.

IUP will deal forthrightly with allegations of misconduct associated with research. The university will conduct an inquiry and, if warranted, an investigation of any possible misconduct by IUP faculty, managers, administrators, staff, and students conducting research. If misconduct is determined to have taken place, appropriate disciplinary action will be taken.

Additional policies are in place to protect research involving human subjects or animals and to ensure compliance with state and federal law.

Students engaged in research can find more information about IUP's research policies, procedures, training, and other resources at www.iup.edu/research/policies.

Experiential Learning

Internship Experiences

University-sponsored internships are often an important part of an academic program. Students may apply for an internship if they have completed 60 credits and have at least a 2.0 GPA. Forty hours of supervised internship is equivalent to one academic credit hour. A maximum of 12 credits is applicable to an undergraduate degree program from internship experiences. Internships are available at a variety of venues, such as governmental agencies, businesses, foundations, and other organizations.

Students who are interested in internships must consult with their program's academic advisor, since they may need to meet additional internship requirements specific to their program, department, or college.

In all cases, an approved agreement between the university and the external organization at which the internship will be performed must be in place before the student can be enrolled for internship credit.

Cooperative Education (Co-ops)

Some departments allow students to participate in cooperative education experiences. These experiences provide students with opportunities to gain practical work experiences related to their academic programs. These experiences may be the first contact students have working in their profession. They are often offered for zero credit and are typically unpaid.

Students may apply for co-ops if they have completed 30 credits and have at least a 2.0 GPA. They typically participate in these programs during their sophomore or junior years, often during the summer. Interested students need to consult with their academic advisors concerning the availability and requirements of co-ops within their department.

In all cases, if students decide to register for a co-op course, an approved agreement between the university and the external organization at which the co-op experience will be performed must be in place before the student can enroll in the course.

Academic Advising

All students are assigned academic advisors. In some curricula, the advisors continue with the same group of advisees from year to year. In other curricula, the freshman advisors remain with their advisee groups only for the students' first year. The student is then assigned an academic advisor for the remaining years to his/her degree in a chosen field. Faculty members advise students on academic achievement, dropping courses, changing curriculum, student activities, study schedules, and career options. Students may identify advisors by signing in to MyIUP (*my.iup.edu*), selecting the "Academics" page, and then under the "Advising" section, selecting "Advisor contact information." Students should then contact their advisors. Should a student fail to identify an advisor, he/she may contact the chairperson of the department for an advisor assignment.

While a faculty member serves to advise the students as they progress to graduation, students are ultimately responsible for knowing and fulfilling the requirements for graduation in their degree program.

Academic Life during the Freshman Year

During the orientation, students meet with orientation faculty advisors to plan a program of courses for their first year. This careful planning considers students' individual preferences, the results of placement testing, and degree program requirements. In the beginning of their first semester, students are expected to look up the name of their individual faculty advisor and arrange meetings and remain in touch to discuss progress and courses.

With a typical freshman academic schedule, students' progress both in the university-wide Liberal Studies program and in their intended majors.

Four Liberal Studies course areas are typically taken by freshmen, and all students are expected to complete these courses during their first year. These are ENGL 101 - Composition I, a Humanities History course, a course from a list of Fine Arts selections, and a Dimensions of Wellness course from those selections. ENGL 101 enhances skills in written expression that are essential to success at the university. A history course builds critical

thinking skills and provides a foundation of knowledge for subsequent courses. Whichever fine arts course is chosen encourages appreciative participation in campus cultural life. Courses in the Dimensions of Wellness component address the many facets of wellness that contribute to health.

Professors teaching these courses work cooperatively with each other and with Student Affairs Division staff members to integrate class work with campus lectures and arts events. Study skills development courses and tutoring resources are available.

Academic Honors

IUP recognizes academic achievement through Provost Scholars, Dean's Lists, and graduation honors.

Provost Scholars

Provost Scholars are recognized annually. At the start of the fall semester, any undergraduate student who meets all of the following requirements will be named a Provost Scholar if he or she

- is a candidate for first bachelor's degree,
- is a current junior or senior with a minimum of 45 credits earned at IUP,
- has a cumulative GPA of 3.50 or higher,
- has not received this award previously (recognition is given only once).

Dean's List

Undergraduate students receive recognition on the Dean's List for each semester (or summer session cumulatively) in which they earn at least a 3.25 GPA based on at least 12 credits of graded (not P/F) undergraduate course work, or a combination of graded undergraduate course work and graded graduate course work applying to the baccalaureate degree.

Graduation Honors

Traditional Latin honors are awarded at graduation to first bachelor's degree candidates with appropriate academic records. Calculation is based on all undergraduate credits and quality points earned at IUP. Graduation honors are not granted for second (subsequent) degrees. The distinctions are:

Cum laude - 3.25 to 3.49 cumulative GPA

Magna cum laude - 3.50 to 3.74 cumulative GPA

Summa cum laude - 3.75 to 4.00 cumulative GPA

Beginning December 1994, non-Latin honors are awarded to associate degree candidates. The distinctions are:

With Honor - 3.25 to 3.49 cumulative undergraduate GPA

With High Honor - 3.50 to 3.74 cumulative undergraduate GPA

With Highest Honor - 3.75 cumulative undergraduate GPA

Determining GPA

Cumulative grade point average (CGPA) is determined by multiplying the credits for a course by the quality points received for that course. Then, the total number of semester quality points for all courses is divided by the total number of credits attempted.

Quality points are not calculated for credits from other schools (i.e., a student transferring from another school earns quality points only on work taken at this university).

Institutional credits are associated with courses numbered below 100. Institutional credits do not apply to degree requirements for graduation but are used to determine enrollment status (full- or part-time), including financial aid and athletic (NCAA) eligibility.

Credits and Cumulative Grade Point Average Requirement

Each student must complete a minimum of 120 credits to graduate, including a minimum of 40 credits and a maximum of 48 in Liberal Studies (all on a passing basis) and must have a 2.0 (C grade) cumulative GPA and a 2.0 (C grade) GPA in his/her major and/or minor field. Some programs require more than 120 credits for graduation.

Classification of Students

To be classified as full-time for the fall, spring, or summer, undergraduate students must be currently enrolled in at least 12 credits. Full-time classification for students enrolled in instructional periods that do not conform to the regularly scheduled academic sessions will be based on the number of enrolled credits during that period of enrollment (e.g., one credit in one week of instruction would equal the minimum full-time certification standard).

For purposes of designating students by class, the following credit classification ranges are used:

Freshmen Fewer than 30 credits

Sophomores 30-59 credits

Juniors 60-89 credits

Seniors 90 credits or more

Class designations are based on credits earned rather than credits attempted. People holding a degree and working toward a second baccalaureate degree may be classified as seniors.

Evaluation of Student Progress by Level or Standing

Each college shall to determine a scheme for evaluating the development and progress of its major students.

A college may use a screening procedure that requires all students enrolled in a specific semester or who will complete a specified number of credits attempted by the end of the current semester to apply for approval for advancement.

All students should check with their faculty advisors to determine if their college uses a screening procedure and, if one is used, what the criteria for that procedure are. Students should also refer to their college's section of the Undergraduate Catalog.

Excess Credit Load

A student who wishes to schedule 18 or more credits must obtain approval from the dean of the college of the student's major; approval will be predicated on various criteria, such as the student's demonstrated competencies, total courses, and specific conditions. If approval is granted, the dean will set the credit limit and make the appropriate computer entry.

Prior Learning and Credit/Exemption Examinations

There are a variety of examinations through which students may earn college credit or exemptions. Courses for which credits or exemptions are awarded by examination will not be used in the determination of GPAs.

When a student receives credit for a course by examination, the credit will be applied to graduation requirements just as though the course had been taken. A student who passes an exemption examination will be exempt from taking that course in his/her academic program. If a student is granted exemption only (no credits) from a course, he/she may need to take another course to fulfill degree requirements.

Where examinations are not available, portfolio assessment may provide a student with the opportunity to earn university credit for college-level learning gained through work and life experience. Each department will determine the maximum number of credits to be awarded for portfolio assessment for its majors.

No more than one-half of the credits required for a student's major may be earned through any combination of examinations or portfolio assessment, nor can these credits be applied toward university residency requirements for awarding of degrees.

Advanced Placement Examinations

Courses taken by students before college admission under the Advanced Placement Program of the College Entrance Examination Board may be recognized by the award of college credit. Those who earn a score of 3, 4, or 5 in the Advanced Placement Examination may be granted credit toward the number of credits required for graduation. For questions regarding the granting of Advanced Placement Examination credits, consult with Transfer Services in the Admissions office.

CLEP/ DSST Examinations

Students who have had other opportunities for instruction or who have advanced in a given field may gain credit for a course through the College Level Examination Program (CLEP) offered through University Testing Services. For questions regarding the granting of CLEP examination credits, consult with Transfer Services in the Admissions office.

International Baccalaureate Examinations

Courses taken by students before college admission under the International Baccalaureate Program may be recognized by the award of college credit. Generally, those who take and pass the Higher-Level examination with a 4 or higher may be granted credit toward the number of credits required for graduation. For questions regarding the granting of International Baccalaureate examination credits, consult with Transfer Services in the Admissions office.

Departmental Examinations

In some departments, students have an opportunity to gain exemption or credit through successful completion of comprehensive examinations by requesting from the academic department an exam as a substitute for completing all the usual requirements of the course.

Portfolio Assessment

Portfolio assessment may provide some students with the opportunity to present evidence of learning for evaluation by a faculty member. It is designed for those with extensive documentable knowledge from work experience, travel, independent study, or other out-of-class experiences. Through portfolio assessment, these experiences are evaluated to determine their appropriateness and applicability for university credit.

Credit awarded through portfolio assessment must conform to specific course titles in the *Undergraduate Catalog* (i.e., no credits will be awarded for general areas of knowledge) and will only be awarded for undergraduate courses. Only currently enrolled students are eligible to request portfolio assessment, and any credits awarded must be intended for use as part of a degree or certificate program.

Before portfolio assessment credits can be awarded, approval must be obtained from the chairperson of the department offering the course, the dean of the appropriate IUP college, and the director of the Office of Extended Studies. Once approved, the title of the course, the credits, and indication that credit was earned through portfolio assessment will be recorded on a student's academic record.

If a related examination is available through the College Level Examination Program (CLEP) or if a departmental examination has previously been established for the course, a portfolio assessment of those credits will not be accepted.

For information about portfolio assessment fees and instructions on how to apply for portfolio assessment, consult with the Office of Extended Studies.

University Policy on Semester Course Syllabi

A syllabus is a document that specifies the expectations and requirements of a given course and protects the interests of faculty and students.

Each course instructor shall distribute a course syllabus, without charge, to each student by the first day of the course. The syllabus may be distributed in hard copy or electronic formats. The syllabus will be consistent with the course content and catalog description approved by the University Senate.

Each syllabus shall contain the following, unless otherwise noted:

1. Instructor Contact Information

- Name and office location
- IUP e-mail address
- Office phone, if available
- Schedule of office hours. Note: Full time faculty must maintain a minimum of five office hours per week spread across three days. For online courses, the method and times for instructor availability to consult with students must be included.

2. Course Information

- Title, number, and section of the course
- Meeting times and building/room location
- Catalog or course description
- Prerequisites, as appropriate
- Learning objectives, specific to discipline or department.

3. Course Materials

- Required book(s) with title, author, edition, and ISBN
- Other required materials, technologies, or software to be purchased or made available to students
- A list of readings, as appropriate
- Information on learning management systems and delivery modes (e.g., D2L, Moodle, Zoom), as appropriate.

4. Course Requirements

- Outline of topics
- Description of course assignments and dates for major assignments and tests
- Listed culminating activity, such as a final examination. Note: Each course shall have a culminating activity given during the scheduled final examination period.

5. Grading Information

- Description and listing of the grading components (e.g., quiz, midterm, final examination, term papers, homework, class participation, etc.) and the relative contributions of assignments/activities/participation to the final grade
- Description of the grading scale.

6. Course Policies and Statements

Syllabi *shall* contain the following policies and statements:

- Policy on course attendance. The policy must be consistent with IUP's policies on Undergraduate and Graduate Course Attendance, Bereavement-related Class Absences, and Anticipated Class Absence for University Representation and Participation, available at <https://www.iup.edu/registrar/catalog/>
- Policy on class disruption, consistent with IUP Undergraduate and Graduate Policies on Class Disruption available at <https://www.iup.edu/registrar/catalog/>

- Complete text on Title IX and Protection of Minors Compliance required by the Board of Governors of the State System of Higher Education, available at <https://www.iup.edu/socialequity/policies/title-ix/>
- Statement on academic integrity, consistent with IUP Undergraduate and Graduate Policies on Academic Integrity, available at <https://www.iup.edu/registrar/catalog/>
- Statement on accommodations for students with disabilities, consistent with IUP's mission and vision on Accommodations for Students with Disabilities, available at www.iup.edu/disabilitysupport.

Syllabi *should* contain the following policies and statements as best practices:

- Policy on student participation. The policy should include language regarding what constitutes participation and how participation or lack of participation may impact the student's grade.
- Policy, including penalties if appropriate, on make-up exams and late submission of assignments.
- Statement that IUP email is IUP's official means of communicating with the student during the course.
- The following statement on use of plagiarism detection services: "IUP is committed to the fundamental values of academic integrity. Academic integrity means honesty and responsibility in scholarly endeavors and behaviors; it means that academic work must be the result of an individual's own effort. To assist instructors in detecting plagiarism, and to protect students from plagiarism, your written work may be submitted to a detection service that reviews submitted material for originality of content."
- Additional instructor policies as appropriate.

Undergraduate Course Attendance Policy

The university expects all students to attend class.

Individual faculty members may define attendance standards appropriate to each course and the consequences of not meeting those standards, within the following guidelines:

1. Each policy must be distributed in writing during the first week of the course. Normally, it is expected that the information dealing with class attendance standards will be distributed with the course syllabus.
2. Each policy must define some limited level of allowable absence.
3. Each policy must recognize students' need to miss class because of illness, personal emergency, university-sponsored activities, bereavement, or active military duty.
4. Each policy must not penalize students who add the class during the regular or specified university drop-add period and must allow those students to make up work missed before adding the class.

Bereavement-related Class Absences

The university community recognizes the impact that the loss of a family member or loved one may have on the emotional and academic wellbeing of a student. In such circumstances, a student may request that a bereavement absence notification be sent to their faculty by contacting either the Office of the Student Advocate at the Academic Success Center or the dean's office of the college of their major, who will send an e-mail to the student's faculty stating that the student is away from the university due to the death of a family member or loved one. Documentation that verifies the death (e.g., a funeral program, death notice, obituary, etc.) and the nature of the student's relationship to the deceased may be requested.

The university encourages allowances for the grieving process, while acknowledging the faculty member's right in determining the terms of variance from the course syllabus. The student is expected to take the initiative to make all arrangements for meeting academic requirements. The university community also encourages students affected by a loss to contact the IUP Counseling Center or other university and community resources, as appropriate, if they are in need of ongoing emotional support.

Anticipated Class Absence for University Representation and Participation

The university community recognizes the value of student participation in cocurricular and extracurricular activities of the university, while acknowledging the faculty member's right to determine the terms of variance from the course syllabus. Ideally, the student is expected to notify the professor as soon as the student knows that a class will be missed due to a university sponsored event. The faculty may request documentation signed by the activity director, coach, or advisor detailing the specifics of the event in advance.

The student must take the initiative to make all arrangements for meeting academic requirements before the anticipated class absence. Excused absences for participation in university-sponsored events will not result in a penalty to the student, provided that the student makes up missed work as required by the professor.

Class Disruptions

Indiana University of Pennsylvania respects the rights of instructors to teach and students to learn while supporting the principle of freedom of expression. Maintenance of these rights requires classroom conditions that do not impede the learning process.

Instructors have the right and responsibility to maintain a proper learning environment in the classroom. As integral members of this partnership, students are expected to participate actively in the learning experience and must do so in an appropriate manner.

Disruptive conduct in the classroom that interferes with the instructor's performance of their professional functions, or that undermines the integrity of students learning, will not be tolerated.

Civil expression and disagreement with the course instructor or other students in the class during times when the instructor permits discussion are not considered disruptive conduct.

The instructor's syllabus will serve as the primary guideline for defining disruptive conduct in any given course.

In addition to any syllabus specifications, disruptive conduct includes, but is not limited to:

- Students who routinely enter class late or depart early;
- Students who repeatedly talk in class without being called upon;
- Students who continually interrupt lectures;
- Students who refuse to comply with an instructor's requests to stop disruptive conduct;
- Students whose cell phones repeatedly ring and/or emit an audible sound during class or students who repeatedly text during class;
- Students who harass an instructor or classmate;
- Students who threaten an instructor or classmate, physically or verbally, or display aggressive behavior;
- Students whose disruptive conduct otherwise violates university policies including the Student Conduct Policies and Procedures and/or the Sexual Misconduct Policy.

This disruptive conduct may result in instructor intervention and/or disciplinary action.

The following procedures are designed to ensure the right of due process for both instructor and student, as well as the university's right to impose penalties for infractions:

1. The instructor will apprise the student of the inappropriateness of the disruptive conduct and ask that the disruptive conduct cease.
2. If disruptive conduct persists, the instructor may:
 - refer the student to campus support services, and/ or
 - remove the student from class for one class meeting and inform the student to contact the instructor prior to the next scheduled class meeting.
3. IF the disruptive conduct persists and negatively impacts the learning of the other students, the instructor may request that the student be removed from class for more than one class period. To do this, the instructor will inform the department chair immediately and submit a signed and dated written statement of the incident to the department chair within two (2) academic calendar days. Within two (2) academic calendar days, the department chair will hold a meeting(s) with the instructor and the student to review the matter. If the student and instructor cannot reach an agreement, the instructor may refer the student for a violation of the Academic Integrity Policy.

If there is any suggestion of violence, instructors always should err on the side of safety by calling University Police. If the disruptive conduct cannot be mitigated by the above procedure, or if the disruptive conduct continues or magnifies negatively impacting the learning of fellow students, the instructor may, in consultation with the department chair, and with the consent of their academic dean, refer the case to the Office of Student Support and Community Standards for adjudication under the Code of Student Conduct and Procedures. The university can impose interim measures, as appropriate, pursuant to the code of Student Conduct and Procedures.

Note: For this policy, the term "instructor" may include teaching assistants and guest lecturers.

Change of Major

Before seeking a change of major, the student should consult with the departmental chair (or chair's designee) of the new major concerning admission and program requirements and the mapping of existing credits into the new curriculum.

To qualify for a change of major, a student must be in academic good standing (2.00 cumulative GPA). This requirement does not apply to students in their first semester at IUP without a GPA. All students must meet any other requirements specific to the new major, including program-specific admission requirements. All teacher certification programs have requirements beyond a 2.00 GPA. Please refer to the individual college sections in this catalog for change of major policies.

Students not in academic good standing (having a cumulative GPA less than 2.00) may petition to change their major with the college dean or designee (e.g., academic standards officer) of the college they wish to enter. After assessing the potential for academic success in the new major, the college dean or designee may grant the change of major.

Students with One Major

A student who has one primary major must apply for a change of major online through MyIUP under Academics/Academic Record, Change of Primary Major.

Student with Secondary or Tertiary Major

A student wanting to add or change a secondary or tertiary major must obtain and complete the appropriate paper application from the department of the new major. Note: the online application is for a student who has one primary major only.

Additional Information

In cases involving students who are veterans, the dean (or dean's designee) of the new major shall give the veteran a statement of prospective approval and the effective date of the proposed changes. This statement shall also indicate the amount of extended time the change of major will entail, if any. The veteran shall take this statement to the Military and Veterans Resource Center at least one month before the effective date of change. No change of major shall be made by veterans until VA approval has been assured.

Dual Baccalaureate Degrees

A student who has earned a minimum of 28 undergraduate credits from IUP and is in academic good standing may apply to pursue a second baccalaureate degree concurrently with the first. This application must be submitted to the dean of the college in which the major program of study for the second baccalaureate degree is housed. If admitted to a second baccalaureate degree program, the student must designate one of the two degree programs to be primary. To receive both degrees at graduation, the student must earn at least 30 credits beyond the requirements of the designated primary program of study. The student must earn a minimum of 150 credits to receive both degrees concurrently. Furthermore:

1. The student may not be graduated until both the degrees are completed.
2. All requirements for the curriculum of each degree must be satisfied.
3. A course required in both degree programs does not have to be repeated for the second degree, but exceptions might apply at the departmental level.
4. All university requirements, such as a minimum GPA and number of residency credits taken at IUP in the major, must be met for each degree separately.
5. Should a student elect to discontinue the pursuit of receiving two baccalaureate degrees simultaneously and decide to apply for graduation with one degree, the student will be bound to the Postbaccalaureate Studies requirements if a later return to IUP is desired.

Conflict of Interest Policy

To fulfill the university's educational mission and uphold standards of academic integrity, faculty members are expected to avoid apparent or actual conflicts of interest, favoritism, or bias. Ideally, instructors shall refrain from teaching any person to whom they are related, including their own children, other close relatives (including but not limited to immediate family members), or romantic partners. Instructors with any conflicts of interest have a duty to report, in a timely fashion, the existence of the conflict to their dean. As part of the disclosure, the instructor shall submit to the dean a strategy or plan that would mitigate the conflicts.

Grading Policies

After each semester or session, a grade report will be available to each student by signing in to MyIUP (*my.iup.edu*).

Grades and Quality Points

In the grading system, the following grades are used in reporting the standing of students at the end of each semester or session:

Grade Description	Quality Points
A Excellent	4 quality points/credit
B Good	3 quality points/credit
C Average	2 quality points/credit
D Pass	1 quality point/credit
F Fail	0 quality points/credit
N Non-Participation Fail	0 quality points/credit
P Pass	0 quality points/credit (for credit courses only)
S Satisfactory	0 quality points (for 0-credit courses only)
U Unsatisfactory	0 quality points (for 0-credit courses only)

Other Designations (carrying no quality points):

AUD Audited Course

EXM Examination

FOL Portfolio Assessment

I Incomplete-For more information, see I (Incomplete) Policy.

L Late Grade/Continuing Course-For more information, see L (Late Grade, Continuing Course) Policy.

OL Other Location

Q Total Semester Withdrawal-Used before 2002 when a student had totally and officially withdrawn from the university for a given semester

R Research in progress (graduate thesis/dissertation only)

TR Transfer

XMT Exemption

W Withdrawal-For more information, see Withdrawal Policies .

***** **Grade not reported by instructor.** No grade information was reported by the end of the normal grading period.

Grades followed by the following designations indicate the application of a policy that has amended the student's cumulative grade point average.

- . **Institutional Credit** (credit counts toward enrollment status but does not count toward graduation or in GPA calculation)
 - .. **Canceled Semester** (see Canceled Semester Policy)
 - * **Fresh Start** (see Fresh Start Policy)
 - : **Extended Credit** (graduate thesis/dissertation only)
-
- Determining GPA
 - Conflict of Interest Policy
 - Audit Policy
 - Midterm Grade Report Policy
 - Pass-Fail Policy
 - Grade Change Policy
 - Course Repeat Policy

Schedule Changes (Drop/Add)

From the student's initial registration time for a given semester through the end of the drop/add period, as defined by the academic calendar (www.iup.edu/academiccalendar), a student may modify his/her schedule to the extent that classes are available or permission to register for a closed or restricted section has been granted and entered into MyIUP. Each student is responsible for completing all appropriate transactions in MyIUP to ensure schedule accuracy. Note that, while the department may enter permission to register for a section, the student must complete the actual registration transaction in MyIUP.

Withdrawal Policies

Individual Course Withdrawal Policy

The Individual Course Withdrawal Policy provides students who are unable to complete a course with the option of withdrawing from that course. This option should be taken only after other options have been discussed with the instructor and/or the student's advisor.

Individual Course Withdrawals may be processed by signing in to MyIUP (my.iup.edu) between the day after the conclusion of the drop/add period and the end of the first two-thirds of the course. After the two-thirds point of a course, students may no longer process Individual Course Withdrawals.

A student needing to withdraw from a course after the deadline must process a request through the office of the dean of his or her college. Approval of the late withdrawal is contingent on documentation of catastrophic circumstances preventing the student from completing the course. If approved, the college office will arrange for recording the "W" designation.

Since instructors inform students of their unsatisfactory performance in class before the withdrawal deadline (Midterm Grade Report Policy), students will be able to discuss course withdrawals with instructors and/or academic advisors to assess alternatives. Students should be aware of the potential impact of course withdrawal on activities that require full-time status, such as financial aid eligibility (percent of completion and eligibility to move to the next class level), athletic eligibility, and health insurance. Students are also cautioned to consider the detrimental impact of "Ws" in a transcript review by a prospective employer or graduate school.

Total University Withdrawal Policy

The Total University Withdrawal Policy provides students who are unable to complete a term with the option of withdrawing from all classes, and thus from the university, for that term. During the fall and spring semesters, Total University Withdrawals may be processed between the first day of

classes and the end of the 11th week of the term. During summer and winter terms, the deadline is the two-thirds point of each course for which the student is registered. Questions about academic impact of withdrawal should be directed to the Department for Disability Access and Advising (see "Process" below). Questions about the financial impact of withdrawal should be addressed to the Office of the Bursar and/or the Office of Financial Aid.

Late Withdrawal: Any undergraduate student who needs to withdraw from the university after the deadline must process a waiver through the office of the dean of his or her college. Approval of the waiver is contingent on documentation of catastrophic circumstances preventing the student from completing the term. Approved waivers must be submitted to the Department for Disability Access and Advising and attached to the Total University Withdrawal form for processing as below.

Involuntary Withdrawal: Any undergraduate student involuntarily withdrawing from the university as a result of suspension or expulsion unrelated to violations of the Academic Integrity Policy will automatically have the designation of "W" assigned to each registered course as a result of such judicial action.

Process: Undergraduate students voluntarily withdrawing from the university should first review information on withdrawals on the Academic Success Center website (www.iup.edu/success) and confirm the financial impact of withdrawal by meeting with a representative from Financial Aid. Then they must process a Total University Withdrawal Form either via MyIUP (my.iup.edu) or by form completion with the Office of Student Advocate. Once the Total University Withdrawal has been processed, a withdrawal designation ("W") will be assigned to all registered courses from which the student is withdrawing. There are no financial leniencies for withdrawals caused by medical situations. IUP's percentage of forfeiture rates follow state and federal dictates, which do not address medical situations.

Readmission: Students should refer to the Readmission Policy in the Admissions section of this catalog for further information about returning to IUP.

Involuntary Withdrawal Policy

Purpose: The purpose of this policy is to provide a procedure for determining whether an identified student's behavior poses a direct threat (as defined herein) and for responding to such behavior. Rarely does student behavior pose a direct threat. However, involuntary withdrawal may be appropriate when

- the student displays behavior that is not prohibited by and/or could not be adjudicated by the Student Behavior Regulations or the Academic Integrity Policy, but that nonetheless poses a direct threat; and
- the student demonstrates a risk of repeated display of such behavior.

Policy: In the absence of other reasonable means or university procedures available for addressing a student's behavior that poses a direct threat, the university will conduct an individualized assessment of the student behavior and circumstances related to the observed behavior of concern and, if appropriate, implement the involuntary, total withdrawal of the identified student from the university.

The student may appeal an involuntary withdrawal decision or may seek reenrollment to the university at a later time, in accordance with the guidelines and procedures articulated below. The decision regarding an appeal or reenrollment request will be considered on the basis of whether the student continues to pose a direct threat.

The policy will be applied in a nondiscriminatory manner, and decisions will be based on consideration of the student's conduct, actions, and statements, not on knowledge or belief that the student has a disability.

Definitions:

1. **Direct Threat:** behavior that poses
 - significant risk to the health or safety of others, or
 - significant risk of damage to university property, or
 - substantial disruption to the activities or education of other students
2. **Significant Risk:** behavior that has a high probability (not just a slightly increased, speculative, or remote risk) of substantial harm to the university community, given information concerning the behavior that is available at the time of consideration
3. **Substantial Disruption:** behavior that continually and considerably interferes with other students' participation in academic, work, extracurricular, housing/residence life, or other university-related activities

Procedures:

1. **Review Process**

1. When made aware of an identified student whose behavior could warrant involuntary withdrawal, the vice president for Student Affairs (or designee) will convene and oversee an Involuntary Withdrawal Review Team to conduct an individualized assessment of the student behavior and circumstances related to the observed behavior of concern and advise him/her whether a direct threat exists. Members of this team will include a representative from the Health Service, the Counseling Center, Disability Support Services, and the student's academic dean (or designee). Depending on the nature of a particular case, and in accordance with FERPA and other relevant laws, other individuals who can assist in evaluating the potential risk posed by the student's behavior, including professionals qualified to interpret the information available for consideration, may be identified to advise the vice president and review team.

The goal of the vice president and review team will be to ascertain whether the student's behavior poses a direct threat. Factors to consider may include

- the nature, duration, and severity of the risk of harm;
 - the likelihood that the potential harm will occur;
 - if the student asserts to have a legally protected disability entitled to reasonable accommodation, whether reasonable modification of university policies, practices, and procedures would sufficiently mitigate the risk.
2. The vice president and review team may request to review educational records and/or to consult with various university community members or others who may be knowledgeable of the student and/or the behavior of concern.
 3. The vice president and review team may request that the student take part in a medical/psychological evaluation. In such a case, the vice president and review team will identify a qualified and licensed health professional who is independent from the university to conduct the evaluation. The university will be responsible for the fees associated with this evaluation.
 4. The vice president and review team will request a personal meeting(s) with the student. Although it is highly desirable that the student choose to attend such a meeting(s), the review process may proceed if he/she does not attend. Furthermore, the direct threat review process will proceed regardless of the student's ongoing university status. At the meeting(s), the vice president and review team will present and discuss the information that is available for consideration. The student may choose to have an advocate accompany and take part with him/her in the meeting(s).
 5. Based on the review team's assessment, including consultation with professionals qualified to interpret the information available for consideration, the vice president may conclude that a direct threat exists and, if so, will determine an appropriate next step, which may entail involuntary, total withdrawal of the student from the university but would not preclude other actions depending on the particular situation.
 6. The review decision will be communicated by the vice president to the student and will provide the primary information that led to the decision. Any conditions for later reenrollment will also be communicated at that time. The decision and related information will be communicated in writing to the student and may be additionally communicated in other forms if the situation permits.
 7. At any time before conclusion of the review process, the student may withdraw voluntarily.
2. **Appeal Process**
 1. The decision of the vice president may be appealed in writing by the student to the IUP president.
 2. An appeal must be filed within 90 calendar days after the decision of the vice president is communicated in writing to the student.
 3. The president's decision on the appeal will be final and conclusive.
 4. During the appeal process, the student will remain totally withdrawn from the university.
 3. **Reenrollment Process**
 1. A student for whom the vice president for Student Affairs concluded a direct threat exists may later request reenrollment to the university. A request must be made to the vice president for Student Affairs. In his/her request, the student should provide evidence that he/she would no longer pose a direct threat and that any conditions for reenrollment have been met. Such student is responsible for any fees associated with treatment, activities, and/or evaluations that he/she has taken part in or obtained in an attempt to demonstrate appropriateness for reenrollment.
 2. The vice president will convene and oversee the Involuntary Withdrawal Review Team regarding the reenrollment of the student.
 3. The vice president and review team may request an updated, independent, university-obtained medical/psychological evaluation and/or request to meet with the student. The university will be responsible for the fees associated with this evaluation.
 4. The decision of the vice president will be based on a determination of whether the student can return safely to the university community and no longer pose a direct threat.
 4. **Emergency Situation**

At any time before the initiation or conclusion of the review process, the vice president may implement an interim involuntary withdrawal of the student from the university, should immediate action appear warranted. A review process, as outlined above, will occur as soon as reasonably possible to consider the interim decision.

Recision: This policy will not be rescinded or modified except by action of the IUP president, following consultation with the University Senate, and in accordance with University Senate Bylaws and Constitution.

Publications Statement: The IUP Office of the Vice President for Student Affairs will publicize and transmit this policy to all members of the university community.

Withdrawal from IUP and Its Impact on Student Financial Aid

Students taking a total university withdrawal from all of their courses at IUP may find their financial aid for that particular semester affected. The 1998 Reauthorization of the Higher Education Act requires educational institutions to calculate a Return of Federal Student Aid Funds (Title IV aid) for students who withdraw from all classes on or before the 60 percent attendance point in the semester. A pro-rata schedule is used to determine the percentage of the semester attended; that percentage determines the amount of federal funds earned. The Office of the Bursar applies the federal guidelines and returns the unearned portion to the federal programs in the following order: (1) Unsubsidized Federal Direct Loan, (2) Subsidized Federal Direct Loan, (3) Federal Perkins Loan, (4) Federal Direct PLUS Loan, (5) Federal Pell Grant, and (6) Federal Supplemental Educational Opportunity Grant.

Example: If a student withdrew on the 32nd calendar day of a semester that encompassed 106 calendar days (not including breaks of five or more days), the student would have attended 30 percent of the semester. Therefore, the student would have earned 30 percent of his or her federal aid.

In addition to affecting current eligibility, a total withdrawal can affect future eligibility for financial aid. Please refer to the section regarding satisfactory academic progress.

Final Examination Policies

Final Examination Policies

The final examination week is part of the regular academic program and must be incorporated into each instructor's course plan for the semester. Final examinations are not the only legitimate type of terminating activity, and therefore, the instructor may choose an appropriate activity that conforms to course objectives.

The terminating activity shall take place only at the time and location assigned by the Office of the Registrar. Unless granted an excused absence, the faculty member responsible for the course must be present to direct the terminating activity. Faculty members may require student participation in the terminating activity.

Faculty members who do not schedule or do not attend the terminating activity for a course may be subject to disciplinary action commensurate with unexcused absences. Once the final examination has been set by the Office of the Registrar, changes and absences must be approved by the instructor's dean. Faculty members are only obligated to offer a makeup in cases where officially scheduled exams are in conflict. Where such conflicts exist during the examination period, the following general rules apply:

1. The higher-numbered course takes precedence. Thus, a student enrolled in GEOG 102 and ECON 325 would take the ECON 325 exam at the assigned time and the makeup in GEOG 102.
2. If courses in conflict are the same level and number, an alphabetical determination by full name of the department, not its acronym, will be made. For example, a student enrolled in MATH 350 (mathematics) and MGMT 350 (management) would take the MGMT 350 exam at the assigned time and a makeup in MATH 350.

NOTE: For stand-alone lab courses that assign letter grades or for lab sections assigned to lecture courses, final exams/ culminating activities may be given the week prior to the Registrar's final exam schedule.

Maximum Number of Exams on One Day/Conflicts

A student may not be required to take more than three final exams on any one regularly scheduled examination day. For any exam over three, a makeup exam must be scheduled by the instructor for the student, at his or her request, into another mutually agreeable regular final examination period. The rules determining conflict resolution (listed above) will determine which exam or exams a student may request as makeups.

Policy for Holding Exams Outside the Prescribed Course Times

Tests, examinations, and quizzes (assessments) should normally be administered during the prescribed course times.

However, for instructors who choose to administer assessments outside the prescribed course times, the following apply:

1. For on-line tests, examinations, and quizzes (assessments):
 - a. The instructor shall inform students in the course syllabus that on-line assessments are required outside the prescribed course times. The instructor shall provide students with as much information as possible regarding window of access to and time to complete these assessments. If an assessment format or timing change occurs at some point in the semester, students shall be provided ample notice.
 - b. Reasonable windows for accessing (e.g., at least 24 hours) and completing on-line assessments shall be provided to students. For instance, instructors should avoid providing access to the assessments only late at night and only on weekends.
 - c. Arrangements for non-punitive makeup assessments must be available for students with valid reasons (e.g., medical, work schedule) for not being able to complete the on-line assessments during the prescribed time window.
2. For tests, examinations, and quizzes (assessments) scheduled outside prescribed course times where the physical presence of the student is required (on-campus or at another location):
 - a. Instructors shall obtain their dean's approval for including the requirement that students need to be physically present for assessments outside the designated course times.
 - b. The requirement shall be listed in the course schedule on MyIUP before registration begins.
 - c. The requirement shall also be included in the course syllabus. The instructor shall provide students with as much information as possible regarding dates and times. If an assessment format or timing change occurs at some point in the semester, students shall be provided ample notice.
 - d. Assessments can only be scheduled on Monday through Thursday from 8 a.m. to 10 p.m. and Friday from 8 a.m. to 4 p.m.
 - e. Appropriate physical facilities must be arranged in advance without encroachment upon other authorized university functions.
 - f. Assessments cannot take precedence over another regularly scheduled class for the student.
 - g. Arrangements for non-punitive makeup assessments must be available for students with valid reasons (e.g., medical, work schedule) for not being able to physically attend the assessment during the prescribed time window.
 - h. For each hour of assessment conducted outside of regularly scheduled class time, an hour of regularly scheduled class time will be cancelled.

Night Exam Policy

All tests, examinations, and quizzes should normally be administered during the prescribed course hours. Deviations to allow night exams for valid educational reasons, within the guidelines listed below, must be approved by the department and the dean. This policy does not include final exams. For more information on final exams, refer to the final exam policy.

Guidelines

1. Night exams can only be scheduled on Monday through Thursday evenings within the 6:00-10:00 p.m. time period.
2. Appropriate physical facilities must be arranged in advance without encroachment upon other authorized university functions.
3. If night exams are to be given, the day of the week on which they will be given must be listed in the course schedule on MyIUP before registration.
4. No night exam can take precedence over a regularly scheduled class.
5. Arrangements for nonpunitive makeup exams at a mutually agreeable time must be available for students who cannot attend the night exam.
6. For each hour of night exams, an hour of regularly scheduled class time will be canceled. Such cancellations are prohibited for two class days immediately preceding or immediately following holiday and/or vacation periods and/or semester terminations, as published in the academic calendar.

Fresh Start Policy

Purpose. A student who has been separated from the university for a minimum of two calendar years (24 consecutive months) and has reenrolled may apply for a Fresh Start from the appropriate college dean or designee. Having reviewed the prior and intervening factors for evidence of potential for improved academic success, the college dean or designee may implement this policy.

Academic Standards. A student reenrolled under this policy must meet current degree requirements and will be reviewed under current academic standards requirements applicable at the time of reenrollment. A student reenrolled under this policy waives the right to exercise the Canceled Semester Policy.

Transcript Effects. All credits and grades for IUP course work taken before reenrollment under this policy shall remain on the transcript. Upon reenrollment, a new cumulative (GPA) is established based on credits and grades earned from the date of reenrollment.

Previously accepted transfer credits and IUP courses in which grades of "C" or better were earned before reenrollment will be reviewed in terms of appropriateness (applicability, timeliness) to the new degree. Those courses, approved by the college dean or designee, will be counted as credits earned and applied toward graduation in the manner of transfer credits.

Financial Aid Effects. Students reenrolled under the Fresh Start Program must still meet the financial aid qualitative and quantitative SAP requirements (using all previously enrolled semester data). Federal regulations do not permit the financial aid office staff to remove or ignore any academic statistics.

Constraints. This policy may be applied only once. For a first bachelor's degree, a minimum of 30 credits must be completed at IUP after a student returns to IUP under this policy. For a first associate degree, a minimum of 15 credits must be completed at IUP after a student returns to IUP under this policy. A student who wishes to enter a major in a college other than the one from which they were dismissed will apply to the original college, which will forward the application and related records to the new college for action.

Canceled Semester Policy

The Canceled Semester Policy provides for cancellation from the cumulative record of the effects of **one semester below a GPA of 2.00** for the purpose of helping a student improve academic standing.

Conditions. A student who has been separated from the university for a minimum of one calendar year (12 consecutive months) and has reenrolled at the University may apply for/request a Canceled Semester from the appropriate college dean or designee. The college dean or designee and/or the student's advisor may also recommend that the student pursue this Canceled Semester option. Having reviewed the prior and intervening factors for evidence of potential for improved academic success, the college dean or designee may grant the canceled semester on a case-by-case basis.

Academic Standards and Application. A student reenrolled under this policy must meet current degree requirements and will be reviewed under current academic standards requirements applicable at the time of reenrollment. A student must apply to the college of which the student was a member at the time of last enrollment. If a student wishes to enter a major in a college other than the one from which they were separated, they will apply to the original college, which will forward the application and related records to the new college for action. The college will inform the Office of the Registrar if the application is approved. Authorization for registration will come from that office.

Transcript Effects. Cancellation removes the mathematic effect of all grades (passing, failing, withdrawals) from the semester. However, all courses and original grades remain visible on the official transcript; credit toward graduation remains for those credits associated with passing grades.

Financial Aid Effects. Students reenrolled under the Canceled Semester Policy must still meet the financial aid qualitative and quantitative SAP requirements (using all previously enrolled semester data). Federal regulations do not permit the financial aid office staff to remove or ignore any academic statistics.

Constraints. This policy may be invoked only once in a student's undergraduate enrollment in the university. While reenrollment may be based on the application of the canceled semester, the transcript record will reflect this only after the student is enrolled and attending IUP. It is not a tool to qualify for transfer to another institution.

Definition of a Semester. A "Canceled Semester" refers to any semester of enrollment, whether full or part-time. Students may elect to use an enrolled summer as their "semester" to be canceled. The entire summer of any given year will be treated as a semester for the purpose of cancellation of grades. The definition of a "Canceled Semester" does not include the winter term.

Course Repeat Policy

A student may not normally repeat an academic course. Exceptions to this policy are

1. **Repeatable courses:** Certain courses are eligible for repeat for credit and grade. These courses are advanced art studio courses, music ensembles, special topics courses (281, 481) if the topic is different, and other specifically designated courses.
2. **D, F, and N grades:**
 1. *Repeat with replacement:* Undergraduate students are permitted to replace the grades and quality points in the GPA calculation for courses in which they receive a "D," "F," or "N" grade by repeating that course at IUP. No more than six repeat-with-replacement attempts are permitted for undergraduate students. A single course can be repeated a maximum of two times. The most recent grade (regardless of whether it is higher or lower) will be the grade used in the GPA calculation. However, the transcript continues to document all academic work, and repeated courses are not deleted from the visual record.
 2. *Course transfers:* Students seeking to replace or average "D," "F," or "N" grades must repeat these courses at IUP. If an IUP course in which a student received an "F" or "N" is repeated at another institution, the credit will transfer to IUP if the course grade is "C" or better, but the original "F" or "N" will continue to count toward the IUP GPA. If an IUP course in which a student received a "D" is repeated at another university, neither the grade nor the credit will transfer.
 3. *Postbaccalaureate students (Undergraduate):* Students seeking to replace or average "D," "F," or "N" grades must repeat these courses at IUP. If an IUP course in which a student received an "F" or "N" is repeated at another institution, the credit will transfer to IUP if the course grade is "C" or better, but the original "F" or "N" will continue to count toward the IUP GPA. If an IUP course in which a student received a "D" is repeated at another university, neither the grade nor the credit will transfer.
3. **Other grades:** Courses in which students earned a grade of "A," "B," "C," or "P," may be repeated only on an audit basis. New grades will not be assigned, and additional credit will not be awarded.

Pass-Fail Policy

A student may take courses on a pass-fail basis to a total of 15 credits throughout his/her university career. The student is limited to one pass-fail course in any given semester during the sophomore, junior, and senior years. All courses in the student's Liberal Studies program and courses that meet major and minor requirements are excluded from this prerogative. When scheduled, such a course shall be included in the student's normal course load for the semester.

The student must declare his/her intent to choose pass-fail in a specific course no later than six weeks after the beginning of the semester or the equivalent time span in a summer session. Once declared, this pass-fail option may not be revoked. Instructors will not be notified of the identity of pass-fail students in their courses. The grade given by the instructor will be translated to a "P" or "F" during grade processing.

A student shall be given academic credit without quality points for a course taken pass-fail upon receiving a passing mark in the course. The credits successfully completed under pass-fail ("passed"), within the overall 15-credit limitation, shall be recorded as counting toward the total credits earned for graduation but not toward the credit-attempted data used in the calculation of the cumulative grade point average. However, if a student fails a pass-fail course, he/she will receive an "F" or "N" (non-participation failure) grade and the corresponding grade point average. An "F" or "N" earned under the pass/fail option may be repeated only under the graded option. (Currently, one course is an exception to the Pass-Fail Course Policy. NMDT 434 is offered only on a pass-fail basis.)

The summer sessions, collectively or in any combination, shall be considered a unit similar to a spring or fall semester for pass-fail purposes. Hence, a student is permitted to take only one course during the summer on a pass-fail basis.

Grade Change Policy

Once earned grades have been recorded, they may be changed only in the case of clerical and/or calculation error or in the event of a successful grade appeal. It is not appropriate to change a grade based on options, such as supplemental assignments, that are not equally available to all students. The deadline for corrections of clerical and/or calculation errors is the end of the next regular (fall/spring) semester after the grade has been awarded.

L (Late Grade, Continuing Course) Policy

The designation of "L" (Late grade, continuing course) is appropriate for cases in which student work is expected to extend beyond a given semester/session. The designation of "L" is not to be confused with a designation of "I," which is only appropriate for individual students unable to complete their course work because of unexpected illness or personal emergency. "L" designations are appropriate for

1. internships, practicums, field experience courses, workshops, and independent studies that, by design, extend beyond the normal end of the grading period,
2. others as approved by the department chairperson and the dean of the college in which the course is taught. If a specific course is always eligible for "L" designations, the dean may grant standing approval for "L" designations every time the course is offered.

Faculty members wanting to use the "L" option for eligible courses must notify the registrar two weeks before the end of classes so that the grades can be pre-entered. "L" designations that are not prerecorded may be given only with the permission of the department chairperson and the dean of the college in which the designation is awarded.

Instructors will convert "L" designations to letter grades at the end of the course. Unless an extension is obtained from the dean of the college in which the course was taught, an "L" designation unresolved at the end of one year will be converted to an F.

To monitor "L" designations, the registrar shall submit to each faculty member routine semester reports of all outstanding "L" designations awarded by that faculty member. The purpose of these reports is to help inform faculty members as they help students complete their course work.

The "L" designation is considered as having MET the prerequisite for subsequent course enrollments.

I (Incomplete) Policy

The "I" (incomplete) designation is used to record work, which so far as covered, is of passing grade (e.g., student has completed passing work throughout most of the semester) but is incomplete because of a late in the semester emergency (e.g., personal illness, bereavement absence, or other unavoidable reason). The "I" designation may be requested by the student or offered by the instructor; however, the instructor will have final say as to whether an "I" designation is a viable option.

Step 1. Before assigning the "I" designation when entering grades online, the instructor must confirm with the student the details of the work to be completed and the deadline for completion. The faculty member must complete a hardcopy Incomplete Grade Form, indicating/documenting the reason for the incomplete grade, the work to be completed, deadlines for completion (it is not necessary to permit the maximum allowable time), and a default grade if the work is not successfully submitted by the established deadline. While the time needed to complete the work will vary based on amount and type of work, instructor time frame, and student situation, incomplete coursework must be submitted to the instructor by the end of the next regular (fall/spring) semester (i.e., last day of classes). For the department files, both the instructor and student will sign a hardcopy Incomplete Grade Form; the instructor signature signifying agreement and the student signature signifying understanding of the required work and time frame. Students are encouraged to stay in touch with the instructor to discuss progress on completing the work during the semester.

Step 2. To officially record the incomplete, the following information must be entered into the IUP Grade Management System: the "I" grade, the default grade (incomplete final grade), and date when deliverable(s) are due (extension date). The system then electronically notifies 1) the instructor, 2) the student, 3) the student's advisor, 4) the chairperson of the department that delivered the course, and 5) the dean of the college of the course that delivered the course.

Step 3. Upon submission of the incomplete coursework, or notification by the student that the course work will not be completed, the instructor will calculate the final course grade and submit the change of grade in the IUP Grade Management System no later than the last day of classes for the next regular (fall/spring) semester.

If the student fails to submit the designated coursework by the last day of classes for the next regular (fall/spring) semester, the "I" designation automatically converts to an F or the default grade at the end of the grading period of the next regular (fall/spring) semester after the designation was assigned. Likewise, if the instructor fails to submit the appropriate grade change by the end of the grading period of the next regular (fall/spring) semester after the designation was assigned, the "I" designation converts to an F or the default grade. To monitor designations, the registrar will provide semester reports of outstanding "I" designations to department chairs.

Under extreme circumstances, with instructor agreement, an "I" designation may be extended through the end of an additional regular semester following the initially designated semester for completion. For this to occur, an instructor must complete another hardcopy Incomplete Grade Form, forward the form to the dean of the college that delivered the course, obtain the dean's approval, and inform the Registrar's Office (registrars-office@iup.edu) of the approved extension. Note: Students have the right to use the University's Grade Appeal Policy to resolve any differences between a student and instructor related to the granting and resolving of an "I" designation.

Receiving an "I" designation in a course means that the course DOES NOT satisfy prerequisites.

IUP Student Grade Appeal Policy

Purpose

Grade Review and Grade Appeal are designed as means to resolve differences between students and faculty members related to grading.

Grade Review

A student may disagree with the instructor's professional evaluation of his or her work but have no grounds for making an appeal based on a claim of discrimination, capriciousness, and/or error as defined below. In these cases, the student should discuss the matter directly with the instructor and, if unsatisfied, with the chairperson of the department in which the course was offered and, if still unsatisfied, with the dean of the college in which the course was offered. If resolution does not occur during grade review, the decision of the instructor shall be final. If there is basis for claiming discrimination, capriciousness, and/or error, the student may proceed with a grade appeal.

Grade Appeal

If a student believes that an improper grade has been assigned, an appeal may be filed only on the following grounds:

1. **Discrimination:** On the basis of race, ethnicity, color, religion, national origin, sex, age, ancestry, disability, gender identity, sexual orientation, veteran status, or political affiliation.
2. **Capricious Evaluation:** Significant and unwarranted deviation from grading procedures and course outlines set at the beginning of the course (ordinarily in a written statement during the first week of the course) or grade assigned arbitrarily on the basis of whim or impulse. Disagreement with the instructor's professional evaluation is not sufficient by itself for a claim of capriciousness.
3. **Error:** Demonstrable, objective determination that a mathematical or clerical error resulted in the entry of an incorrect grade.

Procedures of Appeal

- Level I
- Level II
- Level III
- Ancillary Provisions

Level I: Informal Resolution

Every effort should be made to resolve the disagreement at Level I. Once a student has determined the proper grounds for appeal, he or she must first seek a resolution to the disagreement with the instructor either in person or in writing. If the student is not satisfied with the results, the student must then speak with the chairperson of the department that offers the course. If still unsatisfied, the student must discuss the matter with the dean of the college that offers the course. A Student Government Association member may accompany and advise the student during the Level I procedures. Only after all attempts for resolution at Level I have been exhausted may the student initiate Level II.

Level II: Appeal Screening

1. **Composition:** Each year there shall be appointed a Grade Appeals Committee to determine the existence of the substantive basis for appeal. The committee will be composed of seven voting members: three faculty members appointed by APSCUF, three members elected by and from the Senate Academic Committee (one faculty, one administrator, one student), and one student appointed by the Student Government Association. A quorum consists of a majority of the committee. To take action, a majority of those present must be faculty members. If a quorum of the Level II committee is not available to meet within the designated time limits, the Office of the Provost will seek additional members from the appointing bodies. If these bodies are unable to respond in a timely manner, the Office of the Provost may select additional members from the appropriate groups.
2. **Procedure to Initiate Appeal:** To initiate Level II of the appeal, the student must file an appeal form with the Office of the Provost. This form must be filed within 60 calendar days of the beginning of the semester immediately following the semester in which the grade was received. The Office of the Provost may extend the 60-day limit only in unusual circumstances when equity demands it. (Note: Grade

appeals will not generally be processed during the summer. Therefore, the appeal of any grade received in the spring or summer sessions normally will be processed in the fall. A review will be scheduled in the summer only when the student's academic eligibility is jeopardized by the grade in question or when the student is a graduating senior.) The Office of the Provost will notify the appropriate dean, department chairperson, instructor, APSCUF president, and the Student Government Association president of the student's initiation of the Level II process.

3. **Procedure to Process Appeal:** In addition to the appeal form, the student will be expected to submit pertinent information/documentation and rationale for his/her complaint, which will serve as supporting evidence. The faculty member instructor will be expected to submit in writing the course grading procedure and any other pertinent information. The director of Social Equity or designee will advise in appeals based on discrimination. Appeals based on capriciousness will be reviewed in light of the instructor's announced evaluation and grading system. The committee will review the materials to deny or confirm appeal continuation. Denial of appeal continuation must be by a negative vote of a majority of those present. This committee will immediately inform the Office of the Provost of its findings. Within five (5) class days of the receipt of the committee's report, the provost or designee will notify the student and the instructor of the findings. If the basis for appeal is determined to be substantive, the provost or designee will schedule a Level III Grade Appeal Panel within 15 class days to be convened before the conclusion of the semester.

Level III: Appeal Review

1. **Composition:** The Grade Appeal Panel will consist of five voting members: one academic dean or assistant/associate dean and four faculty members. The Student Government Association Executive Committee designee may advise as requested by the student. The director of Social Equity or designee will advise in appeals based on discrimination. The panel will be constituted from the Grade Appeal Pool by random selection. The panel chairperson will be elected by and from the panel before each review.
2. **Membership:** The Grade Appeal Pool will be established in the spring semester to serve for the following academic year. Using random selection methods, the pool will be established by the Office of the Provost. A pool of three deans or assistant/associate deans and 12 full-time faculty members will be maintained. To establish the membership for each appeal panel, before each appeal, the names of pool members will be supplied to all parties involved. A panel member must recuse him or herself if there is a conflict of interest. The student and the instructor each may eliminate only one dean or assistant/associate dean and two faculty members. The opportunity to disqualify panel members will take place only once. If through self-disqualification and challenges a panel cannot be constituted from the pool, then the Office of the Provost will supplement the pool using appropriate random selection methods.
3. **Procedure:**
 1. Both the student and the instructor will have the right to appear before the panel, present witnesses, and offer evidence. In addition to those specified in Level III, Section A, each may also bring one observer, with whom he or she may consult but who may not participate in the proceedings.
 2. The panel shall determine its rules of order for internal operation. After hearing the evidence brought forth, the panel will privately deliberate and render a decision. If the grade appeal is upheld, the Office of the Provost will assemble a committee of three appropriate faculty members (knowledgeable in the discipline but excluding the instructor against whom the complaint was lodged), who will review the student's work and recommend to the panel the appropriate grade or suitable remedy. The panel will incorporate this recommendation in its determination, which it then forwards to the Office of the Provost for implementation, ordinarily within 30 days. The Office of the Provost will initiate the processing of grade changes resulting from Level III decisions. The Office of the Provost will notify the student of grade changes resulting from Level III decisions.
 3. The written report sent to the Office of the Provost will state whether the student's appeal is upheld or denied; if upheld, the committee's evaluation and remedy will be included. Both the student and the instructor have the right to review all documents related to the appeal. All documents supporting the report will be sealed and kept for one year to ensure the appropriate action is taken before they are destroyed or returned to the individual presenting the evidence.
 4. The Level III decision is final for all involved parties.

Ancillary Provisions

1. **Amendment:** Amendments may be implemented upon concurrence by University Senate, APSCUF Representative Council, and Meet-and-Discuss. In the amendment process, specification of University Senate implies the Council of Trustees' role in approving Senate actions and recognizes the Council of Trustees' final action to change policy.
2. **Appeals on Procedural Grounds:** Decisions may not be challenged merely because the Office of the Provost fails to comply with Ancillary Provisions E, J, or I.
3. **Confidentiality:** Students, faculty, administrators, and staff involved in processing and hearing grade appeals must respect the confidentiality of all aspects of these proceedings. Those breaching confidentiality subject themselves to possible disciplinary action. This shall not abridge the First Amendment rights of the student appellant nor the instructor against whom the appeal has been filed.

4. **Continuing Rights:** This appeal does not supplant any legal rights afforded by the Commonwealth of Pennsylvania and/or the Government of the United States. Nothing in this policy abrogates or modifies any provisions of or rights under the Collective Bargaining Agreement.
5. **Discrimination:** Discrimination in this policy generally means unlawful discrimination. To the extent that any form of discrimination identified in this definition is not unlawful discrimination, this definition shall not be taken to create a cause of appeal against the university. In such cases, the final appeal procedures stated in this policy will be final and binding on the student.
6. **Dissemination of Grade Appeal Information:** The Office of the Provost will annually report to the university community a statistical summary of grade appeal data that does not compromise confidentiality, including (1) the number of appeals filed, (2) the resolutions at levels II and III, and (3) the final implementation of level III decisions.
7. **Faculty Compensation:** If a Level III Grade Appeal Panel (hearing) is scheduled at a time when any faculty member involved is not under contract, the faculty member will be compensated under terms mutually agreed upon at Meet-and-Discuss.
8. **Intended Purpose:** Unless there is intentional misrepresentation, the results of a grade appeal may not be used for disciplinary action of students or instructors.
9. **Intentional Misrepresentation:** Intentional misrepresentation in the filing of grade appeals by students will be referred to the university judicial system for students. Intentional misrepresentation by faculty instructors in the grade appeals process will be referred to the Office of the Provost.
10. **Support Mechanism:** The Office of the Provost, after consultation with the Senate Academic Committee and APSCUF, will be responsible for identifying a pool of at least 10 faculty members well versed in the preparation of grade appeals who will be available upon request to help students or faculty members prepare documentation for the grade appeals process.
11. **Tenure and Promotion Committee Membership on Grade Appeals Committees:** Members of the university-wide tenure and promotion committees may not serve concurrently on grade appeals committees.
12. **Training/Support:** Upon request, the Office of the Provost will offer information sessions/workshops to assist deans, chairs, grade appeals panel/committee members, and members of Student Government Association/university in identifying issues and to provide guidance for the resolution of grade appeals.

Midterm Grade Report Policy

Students are advised to be in contact with instructors throughout the semester to remain current on their course status and progress. To help students monitor their academic performance, instructors will post midterm grades for all undergraduate students. Each semester, the registrar will establish and announce the dates for instructors to enter midterm grades in MyIUP and for students and advisors to access them.

The midterm grade is an advisory grade and is not a permanent part of a student's academic history. It is not used to determine enrollment status, dismissal, or eligibility for financial aid, housing, or athletics.

Audit Policy

All audited courses will be identified as such on the student's grade report and transcript. Work taken on an audit basis will not be graded and will not count toward the fulfillment of requirements for a degree to be awarded by IUP. Since credits attempted and quality points will not be awarded for audited courses, they will not affect the student's grade-point average in any way. Auditors will pay normal tuition and such other fees as may be required for the course.

To audit an undergraduate course, a person must be admitted to the university and have met course prerequisites. Students wishing to audit a course for which they registered should obtain a Course Audit form from the office of the department offering the course. Students must first register for the course before filing a course audit form. All audit processing, including revocation of previously requested audit classification, must be completed during the regular drop/add period. Copies of the completed form are returned to the Office of the Registrar, to the department chairperson, and to the student. Audit students have the same privileges as other students in all course work. There is no limit on the number of courses which may be audited.

University Resources

University Police

Website: <http://www.iup.edu/police>

IT Support Center

Website: www.iup.edu/itsupportcenter

The Co-Op Store

Website: <http://www.iupstore.com>

IUP Hadley Union Building

Website: <https://www.iup.edu/coop>

IUP Emergency Notification System

Website: <http://www.iup.edu/ens>

Parking

Website: <http://www.iup.edu/parking>

The Harrisburg Internship Semester (THIS)

E-mail: Dr. Rachel Sternfeld; ras@iup.edu

The Harrisburg Internship Semester (THIS) is available to an exceptional student from any IUP major each fall and spring semester. The program provides a semester-long experience at the policymaking level in the executive or legislative branches of state government as well as independent boards, agencies, or commissions. Students will earn 15 credits.

Requirements for eligibility are 45 or more earned credits at the time of application and a cumulative GPA of at least 3.0. Applicants will submit two letters of recommendation and a sample of their writing skills which must be a copy of an IUP writing assignment that has been graded by an instructor.

Of the 15 credits THIS interns earn, nine credits are for the internship placement experience, three credits for completing an individualized directed project involving substantial research and analysis, and three credits are earned for participation in a rigorous academic seminar. The program is directed by a Pennsylvania State System faculty member selected to direct the program in Harrisburg. This faculty member, the THIS Resident Faculty Director, will be the site supervisor and teach the seminar course. Grades and credits will be recorded on the students' academic progress reports at IUP. See the course descriptions under UVWD 480 and UVWD 493.

Students in THIS are responsible for tuition and fees as in any normal semester. A stipend of \$4,000 is provided to assist with living expenses. The Resident Faculty Director will help students find housing in Harrisburg. Students are responsible for their own transportation between their home and Harrisburg.

An IUP faculty member serves as the THIS Faculty Campus Coordinator and is responsible for the THIS student selection process. Please contact the Provost's Office to get the contact information for the current THIS Faculty Campus Coordinator to learn more about the program and find out about coming deadlines.

Office of International Education

Website: www.iup.edu/international

Michele L. Petrucci, Associate Vice President for International Education and Global Engagement

Emma Archer, Director of American Language Institute and International Partnerships

Jessica Dories, Director of International Student and Scholar Services

Jessica Mulvihill, Director of Education Abroad

The Office of International Education (OIE) is a comprehensive international education office and the primary catalyst for IUP's international initiatives. The OIE proactively facilitates, promotes, and organizes the international programs, events, support, and initiatives to more fully diversify IUP and the local western Pennsylvania communities.

The OIE is a central source of information that provides special services for admitted international students, visiting scholars, and international visitors and faculty members. The office is also the main resource and support for education abroad programs and international programming. The office provides the following services:

- extensive orientation program for new international students
- advising on immigration matters
- counseling on cultural and personal matters
- preparation and processing of immigration documents
- predeparture orientation program for education abroad participants
- re-entry program for education abroad participants returning from overseas
- intercultural programming for the campus and Indiana community
- aid to faculty members for international programming and faculty-led education abroad
- organization of international events such as International Education Week and International Unity Day
- management of international programs such as Conversation Partners and International Friendship Program
- management and oversight of IUP's intensive English program, the American Language Institute
- International agreements and partnerships
- International recruiting and marketing
 - International Exchange and Education Abroad Programs
 - CEA
 - International Student Exchange Program (ISEP)
 - SAI
 - Semester at Sea (SAS)
 - Faculty-Led Program
 - American Language Institute (ALI)

International Exchange and Education Abroad Programs

Website: www.iup.edu/educationabroad

Michele L. Petrucci, Associate Vice President for International Education and Global Engagement

Jessica Mulvihill, Director of Education Abroad

Through the OIE, IUP students may take part in education abroad programs. Students seeking information on academic programs offered by educational institutions abroad are welcome to read materials in the office and online. Qualified students planning to travel or study abroad should go to the OIE to start and complete the process.

Programs include:

Argentina, Buenos Aires. Universidad del Salvador. Students can study Spanish language and culture in a university setting while experiencing the life metropolitan Buenos Aires has to offer.

Australia, Manly. IUP students can study courses in Hospitality Management, Business, Sports Management, Event Management, Marketing, and Tourism. ICMS is on a trimester schedule which falls inline well with IUP's semesters. The autumn trimester runs from September to December and the spring trimester runs from February to May. Students are also able to take advantage of their May trimester that runs from late May to late August.

Botswana, Gaborone. Students in most majors can study in Southern Africa at the University of Botswana. The university offers an African culture program as well as courses in business, education, science, humanities, and social sciences. Language of instruction is English.

Chile, Valparaiso. Pontificia Universidad Catolica de Valparaiso (PUCV). Study for one semester, an academic year, or for the summer at PUCV. Students can enroll in intensive Spanish language and Chilean culture courses or main curriculum. Languages of instruction are English and Spanish.

China, Chengdu. Students interested in improving their Chinese language and culture skills can study at Sichuan University. Chengdu is the land of pandas and many historical sites. Languages of instruction are Chinese and English.

China, Macau. This exchange at the University of Macau focuses on business study and offers courses in the following areas: accounting, computer studies, economics, finance, management, and mathematics. Language of instruction is English.

China, Nanjing. Students can attend Nanjing University and experience Chinese culture and language for a semester or an academic year. Language of instruction is Chinese.

China, Shanghai. Students can attend Shanghai Normal University and experience Chinese culture and language for a semester or an academic year. Language of instruction is Chinese.

Croatia, Zagreb. College of Fine Arts students may study for one semester or an academic year at the Academy of Fine Arts, Academy of Dramatic Arts, or the Academy of Music at the University of Zagreb. Language of instruction is English.

England, Essex. Students can attend the University of Essex for one semester and enroll in courses in any of the nearly 50 academic programs offered. Language of instruction is English.

England, Worcester. Students are offered an opportunity to study at the University of Worcester for one semester or an academic year. Courses are offered in a variety of fields of study.

Finland, Helsinki. Students can attend the University of Helsinki for a semester or an academic year. Courses are offered in a variety of majors. Language of instruction is English.

France, Nancy. École Nationale Supérieure d'Art de Nancy (ENSA). Students in their junior or senior year can apply to take courses in fine art at ENSA for a semester or an academic year. Languages of instruction are English and French.

France, Nancy. Institute Commerciale de Nancy (ICN). A prestigious Grande Ecole, the ICN offers business courses taught in English.

France, Nancy/Metz (summer). ICN offers a competitive summer program for business students. Language of instruction is English.

France, Paris. Paris International Business School (INSEEC). Students pursuing a business degree can study for a semester or an academic year. Languages of instruction are English and French.

Germany, Duisburg (summer). This exchange is for business and economics majors. The BEST program offers students a chance to study in Germany for a short period. Language of instruction is English.

Germany, Nürnberg. Students may study for one semester or an academic year at the Georg Simon Ohm University of Applied Sciences. Business, sociology, and German students are eligible. Languages of instruction are English and German.

Ghana, Kumasi. Students can study at the only technical university in Ghana and one of the best in Africa. Courses in humanities, business administration, social sciences, and sciences are offered. Language of instruction is English.

India, Bangalore (summer). Students in the MBA program may take IUP courses in Bangalore on a short, summer program. For information, contact the Eberly College of Business and Information Technology.

Indonesia, Jakarta. Universitas Multimedia Nusantara (UNM). Students can attend the UNM for one semester and enroll in a variety of courses including Indonesian language and cultural studies. Language of instruction is English.

Indonesia, Singaraja. Ganesha University of Education (UNDIKSHA). Ganesha University of Education offers students a unique study atmosphere for a semester or an academic year. Located on the north coast of Bali, the campus is in close proximity to the beach, eco-tourism attractions, and historic temples. Students can take a variety of courses as well as intensive Indonesian language courses. Language of instruction is English.

Israel, Haifa. Study in a diverse and historical city in Israel for a summer, semester or year at the University of Haifa. Languages of instruction are Hebrew and English, plus intensive Hebrew or Arabic language classes.

Japan, Miyazaki (summer). The University of Miyazaki offers students a summer program exploring Japanese language and culture. Languages of instruction are English and Japanese.

Japan, Nagasaki. Students can attend the University of Nagasaki for a semester or an academic year. They can enroll in Japanese language intensive courses or in courses related to their major. Languages of instruction are English and Japanese.

Japan, Nagoya. Nagoya University of Foreign Studies is a private university where students can study Japanese language and culture at many different levels as well as disciplines in English.

Japan, Nagoya. Students can study for one semester or an academic year at Nagoya Gakuin University. A variety of courses are offered in the Asian Studies program. Languages of instruction are English and Japanese.

Japan, Osaka. The opportunity to study for a semester or one academic year at Kansai Gaidai University is available to students interested in Japanese culture. A variety of courses are offered in the Asian Studies program. Languages of instruction are English and Japanese.

Malaysia, Subung Jaya. All students are welcome to attend INTI University, a private university that offers a full curriculum. Exchanges are available for fall or spring semester or for a full academic year. Language of instruction is English.

Mexico, Puebla. Students wishing to enroll in courses in Spanish, business, international relations/studies, anthropology, and hotel and restaurant management with an interest in Mexican culture have the opportunity to study at the Universidad de las Americas—Puebla for one semester, academic year, or summer. Languages of instruction are Spanish and English (specific programs such as business and fine arts).

Norway, Oslo. Students may take courses at Oslo Metropolitan University College of Applied Sciences in art, economics, social sciences, education, fine arts, and more. Language of instruction is English.

Norway (various cities). Western Norway University of Applied Sciences is a Norwegian public institution of higher education, established in January 2017 through the merging of formerly independent colleges across five campuses: Bergen, Førde, Haugesund, Sogndal and Stord. Its oldest programs - teacher education in Stord - can be traced to 1839. Various subject matters can be studied. Instruction is in English and Norwegian.

Poland, Poznan. Students studying chemistry, criminology, English, employment and labor relations, journalism and public relations, physics, psychology, and teacher education have the opportunity to study for a semester or an academic year at Adam Mickiewicz University. Language of instruction is Polish; however, many courses are offered in English.

Scotland (various cities). Students may take in a variety of courses at the University of the Highlands and Islands. Students mainly study at the Inverness or Perth campuses.

Slovenia, Ljubljana. Students studying in the College of Fine Arts have the opportunity to study for one semester or an academic year at the Academy of Music at the University of Ljubljana.

South Korea, Daegu. Study for a summer, one semester, or an academic year at Kyungpook National University. A variety of courses are offered in the Asian Studies program. Languages of instruction are English and Korean.

South Korea, South Jeolla. Students interested in improving their Korean language and culture skills and taking academic courses in English can study at Korea University—Sejong campus, located outside of Seoul. Students can experience a quieter side of Korea. Languages of instruction are Korean and English.

Spain, Valladolid (spring). Students with 12 earned credits in Spanish and an interest in experiencing Spain's culture have an opportunity to participate in the Pennsylvania Valladolid Study in Spain Program during the spring semester. This experience enables students to spend a period of 20 weeks immersed in Spanish culture and language at the University of Valladolid.

Sweden, Karlstad. Students wishing to enroll in a range of courses with a desire to experience Swedish culture are invited to study at Karlstad University. Language of instruction is English.

Taiwan, Tamsui. Experience life in Taiwan at Tamkang University. Across-the-board curriculum is offered for semester or academic-year exchanges. Languages of instruction are Chinese and English (specific programs).

Taiwan, Taipei. Study in the heart of the capital at the University of Taipei in various academic programs; especially Kinesiology. Languages of instruction are Chinese and English.

Taiwan, Taichung. Providence University. Students can attend Providence University for a semester or summer program. Intensive Mandarin Chinese language courses, Taiwanese culture, and both undergraduate and graduate business courses are available. Languages of instruction are English and Mandarin Chinese.

Turkey, Ankara. Students may study at the Middle East Technical University, located in the country's capital, in a full range of subjects, all taught in English. METU is one of the most elite universities in Turkey.

CEA Study Abroad

IUP students can participate in a range of English-medium programs (including internships) around the world through CEA Study Abroad. For more information, visit the website www.ceastudyabroad.com and the OIE.

International Student Exchange Program - DIRECT (ISEP)

The ISEP offers a wide range of affordable educational and cultural experiences (including internships) for one semester or academic year for participants at more than 100 institutions in 35 different countries (summer and longer exchanges are also possible). Students who do not speak a foreign language still have many sites in which the language of instruction is English. Students who do speak a foreign language have even more options. For more information, visit the website www.isep.org and the OIE.

SAI Programs

Programs in Italy, France, and Spain are offered. Consider studying at one of the English-medium institutions offered through IUP's affiliate agreement with SAI: Rome, Florence, Milan, Sorrento, Paris, and Barcelona. A wide range of courses are offered. Language of instruction is English. For more information, visit the website <https://www.saiprograms.com/>

Semester at Sea (SAS)

This is a multiple-country education abroad program open to students of all majors. The unique SAS shipboard environment travels the world while offering cocurricular activities and academics. For more information, visit the website www.semesteratsea.org.

Faculty-Led Program

Faculty-led programs are designed and taught and led by IUP faculty in an international setting. The courses and locations vary from year to year. Current approved programming can be found on the OIE's website www.iup.edu/educationabroad.

American Language Institute (ALI)—English Language Programs for International Students and Visitors

Website: www.iup.edu/ali

Michele L. Petrucci, Executive Director

Emma K. Archer, Assistant Director

The American Language Institute (ALI) offers intensive English classes for international students and visitors. The ALI provides courses for students from beginner to advanced proficiency in English. Students at the ALI take 24 hours of course work a week, with 14-week semesters in the fall and spring and a seven-week term in the summer. An institutional TOEFL is administered at the conclusion of each semester, and results can be used for admission to IUP. Cocurricular social and cultural programs are offered to all ALI students.

The ALI offers several programs of study to meet the language needs and academic interests of international students:

- The English for Academic Purposes program is for applicants preparing for study at a US college or university, exchange students, and individuals in the community who want to improve their English skills.
- The ALI Provisional program (ALI-P) is for applicants who plan to study at IUP. This program allows students to receive conditional admission to an undergraduate and several graduate programs at IUP while they study at the ALI to reach the required level of English proficiency.
- The ALI Bridge program allows qualified students to take up to two IUP classes while also studying English at the ALI. If students successfully complete nine IUP credits through the Bridge program, the language proficiency test requirement may be waived for undergraduate admission.

The ALI also works with groups and organizations to create programs to meet their students' schedules and specific language learning needs. Please contact the ALI for more information.

Academic Success Center (ASC@IUP)

Website: www.iup.edu/success

The Academic Success Center at IUP (ASC@IUP) supports the achievement of students as they attain their academic goals. ASC@IUP is an important bridge between Academic Affairs, Student Affairs, and Enrollment Management in support of student success. It serves as a hub through which students can navigate the network of offices and service providers across the university.

Equally important is the support provided to faculty members in their role as academic advisors. ASC@IUP provides resources to faculty, using a variety of avenues, which are important tools for working with students.

Resources for students, faculty, and parents are provided online. The center is coordinated by the Office of the Provost, with outreach to all divisions across the university. The Office of the Student Advocate, Office of New Students Orientation, the Major and Career Exploration Center, and the ASC@IUP Walk-in Tutoring Center are components of ASC@IUP.

Student Advocate (Office of the)

Website: www.iup.edu/success/student-advocate/

E-mail: asc-inquiry@iup.edu

Building on a culture of student success and retention, the Office of the Student Advocate provides personal student support, outreach services to at-risk populations, and information/referrals to other campus resources for both students and parents. The Advocate assists currently enrolled students as they navigate university systems; can address concerns about life on campus, academic policies, and will provide referrals as appropriate, with the goal of assisting students to fully engage in the learning process.

The Student Advocate oversees the Lead Peer Mentoring Program. Peer Mentors are fellow students who guide students to resources and experiences across the university. All students have easy access to the Student Advocate, a staff member dedicated to helping students through any roadblocks they might encounter.

The Student Advocate serves as the point-of-contact for any student seeking to withdraw from the university by coordinating the Total University Withdrawal process with other offices on campus. The Advocate strives to create a supportive environment and offers high quality services on behalf of the entire student population in collaboration with others across the university.

New Student Orientation (Office of)

Website: www.iup.edu/orientation

E-mail: orientation-testing@iup.edu

IUP provides an orientation program for all new students, including all entering freshman and transfer students. Students are expected to participate in the mandatory orientation program that provides information, resources, and interactions designed to ensure a successful first-year or transfer experience. IUP views student orientation as an opportunity to showcase the academic and student experiences that are important to initial success, satisfaction, and retention within the university. The first year at IUP is critical in regard to academic success. During this time, students must develop academic competency in the college curriculum and adjust to the personal decision-making process college life affords. New Student Orientation is designed to assist with this important college adjustment. Freshman and transfer students are expected to participate fully in the orientation program, including any overnight components and associated activities.

Freshman Spring/Summer Orientation: The orientation, advising, and course registration program occurs during the spring or summer immediately preceding students' matriculation on campus. This overnight, two-day program is designed to assess academic readiness for courses integral to the IUP curriculum and acquaint students with the IUP collegiate experience. A concurrent Parent and Family Member Orientation is also offered.

Transfer Summer Orientation: Transfer orientation serves to acquaint students with prior college experience with IUP resources to support academic and career success. The program provides placement testing for students in selected majors; concluding with advisement and course registration. A concurrent Parent and Family Member Orientation is also offered.

Major and Career Exploration Center (MCEC)

Website: www.iup.edu/exploremajors
E-mail: mcec-explore@iup.edu

The Major and Career Exploration Center is designed to assist all students, regardless of class year, with making informed academic and career decisions. Through the use of various tools and resources, peer advisors assist students through evaluating their options while sharing what IUP has to offer in relation to their interests. Services offered include the FOCUS-2 test, several interest inventories, and a resource library.

Students may also want to consider taking DVST 170 - Career Exploration. This class introduces students to the theoretical and practical framework with which to explore careers compatible with overall academic skills, aptitudes, and life goals. Students will examine the world of work, assess their interests and abilities, and make realistic decisions on academic majors and careers.

ASC@IUP Tutoring Center

Website: www.iup.edu/success

IUP offers several tutoring services for students, the ASC@IUP Tutoring Center provides free peer-to-peer tutoring with no appointment necessary and is located in Stabley Library. Students should refer to the Tutoring Schedule online at the start of each semester for specific tutoring times and locations. Supplemental Instruction (SI) and other discipline-specific tutoring can be found at other locations across campus.

Career and Professional Development Center

Website: www.iup.edu/career **E-mail:** career-development@iup.edu

Career services are available to students and alumni. In addition to career education, the primary functions of the office are to arrange for campus interviews, build and maintain a current online database of job and internship opportunities, maintain extensive online resources with employment information, conduct follow-up studies of graduates, and provide general assistance in the career-planning and job-seeking processes. The center provides multiple opportunities for networking and career fair participation, while maintaining an active social media presence with students, alumni, employers, and other stakeholders.

Service Learning offers IUP students curriculum-based, wage-supported, and volunteer opportunities to explore, expand, and fulfill their altruistic interests. The office works closely with nearly 60 Indiana County human service, federal, state, and local government agencies and the Indiana Area School District to place students in volunteer host sites. Visit the office website at www.iup.edu/servicelearning.

Internships/Cooperative Learning: Many departments of the university have developed internship/cooperative education programs that allow a student to participate in university-supervised work experiences for variable academic credit. Internships/co-ops are viewed as an integral part of a student's academic preparation. An internship/co-op gives the student an opportunity to apply theoretical and philosophical tenets of a discipline in a practical job experience related to the student's academic program.

For general information about university internships and co-ops, consult the experiential learning liaison in the Career and Professional Development Center, 302 Pratt Hall, the student's department internship/co-op coordinator, or the website www.iup.edu/internships.

Center for Teaching Excellence

Website: www.iup.edu/teachingexcellence
Stephanie A. Taylor-Davis, Director

The mission of the Center for Teaching Excellence is to foster the enhancement of teaching excellence in all its forms. The center offers many professional development opportunities to the campus community related to teaching and pedagogy. The center recognizes excellence in teaching through selection and presentation of the annual Faculty Recognition Awards. The center's Reflective Practice Project promotes effective teaching through the use of workshops, monthly meetings, and small "teaching circles." New Faculty Orientation, offered by the center, introduces new faculty members to the university and community and explores topics such as teaching, advising, and assessment. Current relevant and research-based teaching resources are available on the center's website. Faculty members are invited and encouraged to utilize the center resources to enhance student engagement in the learning process.

Center for Learning Enhancement

The center is an academic support service sponsored by the Department of Developmental Studies. The center provides educational support services in the areas of reading, mathematics, biological and physical sciences, foreign languages, social sciences, study skills, and related areas. See more information in the Department of Developmental Studies section of this catalog.

The IUP Libraries

Website: www.iup.edu/library

Erik Nordberg, Dean

Kelly Heider, Chair

The IUP Libraries serve the academic and scholarly needs of students and faculty. Library collections and holdings include 526,098 print volumes, 279,110 electronic books, 263 print periodical subscriptions, and over 80,000 full-text electronic professional journals. The Library subscribes to 359 full-text electronic databases and has a collection of 146,806 microforms. The Libraries' supplement its holdings via Interlibrary loan services. In addition to the main library, the Orendorff Music Library is located in Cogswell Hall at the Indiana campus. There are also Libraries at each of the regional campuses located in Punxsutawney and Northpointe. All Library resources are available remotely and throughout the Libraries.

The Library faculty offer individual and group instruction as well as several credit-bearing courses and Information Literacy.

Jones White Writing Center

Website: <https://www.iup.edu/writingcenter/>

Dana Lynn Driscoll, Director

The Jones White Writing Center offers one-on-one tutoring, workshops, a graduate editing service, and writing-related events for the campus community. The Writing Center can assist students with any piece of writing at any stage of the writing process, in person or online. Individual tutorials with trained graduate and undergraduate tutors can last 30-60 minutes and can be scheduled at a variety of convenient times. Class and campus-wide workshops on a wide variety of writing topics are led by experienced tutors. The Writing Center also offers regular events and activities to support writers on campus. Our main Eicher location offers a quiet, comfortable space with computers, printers, couches, and refreshments for students to work on their writing. Meet us online, in our Eicher 218 location, or most evenings in the Stapleton Library. The website offers a host of online resources available to view and download.

Writing Across the Curriculum

All students must include among the total courses required for graduation a minimum of two designated writing-intensive courses. One of these courses must be in the student's primary major; the other(s) may be in Liberal Studies, college or major requirements, or free electives. Such courses, which involve extensive use of writing as part of the learning experience, are identified with a W as the first character in the section number (such as MATH 350-W01 History of Mathematics) in the listing of course offerings. For more information, please see the Liberal Studies Courses page.

The departments of Anthropology, Biology, English, Food and Nutrition, Foreign Languages, History, Hospitality Management, Journalism and Public Relations, Nursing and Allied Health (NURS majors only), Philosophy, Political Science, Professional Studies in Education, Psychology, Religious Studies, Safety Science, and Sociology currently have approved writing plans. **Students majoring in these departments are not required to take writing-intensive courses.**

Interdisciplinary Programs

Interdisciplinary Degree Programs

- Behavioral and Mental Health Track, Public Health, BS
- Environmental and Occupational Health Track, Public Health, BS
- Epidemiology and Biostatistics Track, Public Health, BS
- Global and Rural Communities Track, Public Health, BS

Interdisciplinary Minors

- Business Administration (for Nonbusiness Majors) Minor
- Child and Adult Advocacy Studies (CAAST) for Majors other than Psychology and Sociology Minor
- Child and Adult Advocacy Studies (CAAST) for Psychology Majors Minor
- Child and Adult Advocacy Studies (CAAST) for Sociology/Human Services Track majors Minor
- Cyber Security Minor
- Entrepreneurship for Fine Arts Minor
- Global Health Minor
- Pre-law Interdisciplinary Minor
- Professional Teamwork and Leadership Minor
- Sustainability Studies Minor

Interdisciplinary Certificates

- Child and Adult Advocacy Studies Certificate (CAAST)
- Living Learning/Global Scholarship Certificate
- Living Learning/Scientific Communication Certificate
- Popular Music Studies Certificate
- Shale, Gas, and Energy Certificate

Military Science

Website: www.iup.edu/rotc

LTC Dennis Faulkner, Chair

Military Science Department

- Military Science Program
- Military Leadership Minor

Reserve Officers' Training Corps

The United States Army established a Senior Reserve Officers' Training Corps program at the university in 1950. The ROTC program facilitates leadership education that students can apply throughout their careers, be they in business, industry, technology, education, the physical sciences, or the humanities. All Military Science credits count toward graduation, and a student who completes the total program can earn a commission as a second lieutenant and receive placement in one of 24 professional officer specialties in the US Army, including Military Intelligence, Military Police, Signal, Medical Service, and the Corps of Engineers.

The ROTC program is divided into two phases: the Basic Course (freshman and sophomore years) and the Advanced Course (junior and senior years). In most cases, students progress through the ROTC program by enrolling in MLSC 101 and MLSC 102 as freshmen. By taking MLSC 101 and MLSC 102, the student fulfills the university's 3-credit Liberal Studies requirement in Health and Wellness. Students who continue in the Basic Course by enrolling in MLSC 203 and MLSC 204 as sophomores incur no military obligation, but they retain the opportunity to compete for a

full-tuition ROTC scholarship. Whether they win an ROTC scholarship or not, all students who complete the Basic Course are eligible to enroll in the ROTC Advanced Course. All students receive financial assistance while they are enrolled in the Advanced Course.

What ROTC Offers

- Comprehensive academic program in military leadership teaches practical skills such as physical fitness, adventure training, rappelling, marksmanship, orienteering, and first-aid techniques.
- Regular ROTC classes for two semesters satisfy the mandatory Health and Wellness Liberal Studies requirement for graduation.
- Equipment, ROTC textbooks, and uniforms are issued, without cost, to enrolled students.
- Students enrolled in the Basic Course (MLSC 101, MLSC 102, MLSC 203, and MLSC 204) become eligible for full-tuition scholarships and enrollment in the ROTC Advanced Course.
- Students enrolled in the Advanced Course (MLSC 305, MLSC 306, MLSC 407, and MLSC 408) receive a cash stipend (\$450-\$500 each month) for 10 months during the academic year.
- Students who complete the Advanced Course and graduate from IUP receive commissions as second lieutenants and serve in one of three Army components: Active Army, National Guard, or Army Reserve.
- Dedicated dorms in Stephenson Hall with discounted room and board rates.

ROTC Basic Course

The first two years of Military Science (MLSC 101, MLSC 102, MLSC 203, and MLSC 204) provide a background of the historical role of military forces as well as current national military objectives. In addition, students develop basic leadership skills in problem solving and decision making and learn survival techniques, map reading, rappelling, and marksmanship. Graduates of the Basic Course incur no commitment to enroll in the ROTC Advanced Course and incur no obligation for military service. Students may enroll or withdraw from any of the four courses in the ROTC Basic Course under the same provisions and in the same manner as other academic courses at IUP. Veterans of US Armed Forces and students who complete the ROTC Leaders Training Course at Fort Knox, Kentucky, may receive exemption from the ROTC Basic Course. Students who have completed a basic training course are awarded academic credits for MLSC 101 and MLSC 102.

ROTC Advanced Course

The last two years of Military Science (MLSC 305, MLSC 306, MLSC 407, and MLSC 408) compose the Advanced Course and lead to a commission as an officer in the US Army. To be eligible to enroll in the Advanced Course, a student must meet these criteria: be a citizen of the United States; be physically fit and pass a physical examination; be an enrolled academic junior or senior with at least a 2.0 GPA; be not less than 17 years of age but less than 39 by the anticipated graduation date; successfully complete the ROTC Basic Course or its equivalent; and be accepted by the professor of military science. Advanced Course students study advanced leadership, management, professional ethics, small unit tactics, military law, and instructional and training techniques. Practical application is the rule, and students have the opportunity to practice and polish their skills as members of the ROTC battalion leadership. Once Advanced Course students agree in writing to complete the Advanced Course, graduate on time, and accept a commission as an officer, they become eligible to receive a monthly tax-free cash stipend of \$450 for 10 months of the academic year.

Scholarships

High school seniors are eligible to apply for a national four-year or three-year Advanced Designee Scholarship. The scholarship is awarded while the student is still in high school; the cadet must contract with the ROTC at the start of the freshman year of college. Information and criteria regarding who is eligible and how to apply can be found at www.goarmy.com/rotc.

IUP students can compete for campus-based 3.5-year, 3-year, 2.5-year, or 2-year scholarships, and graduate students can compete for campus-based two-year scholarships. Currently, the campus-based scholarships available are as follows:

1. **Line Scholarship:** Open to all majors, it allows cadets to compete for accession into any Army branch or component.
2. **Nurse Scholarship:** Open only to nursing majors, it allows cadets to compete for Active, Guard, or Reserve components.
3. **STEM Scholarship:** Open to all science, technology, engineering, and mathematics majors, it allows cadets to compete for accession into any Army branch or component.

4. **Dedicated National Guard:** Open to all majors, it dedicates cadets into service in the National Guard. Cadets must enter into the simultaneous membership program.
5. **Dedicated Army Reserve:** Open to all majors, it dedicates cadets into service in the US Army Reserves. Cadets must enter into the simultaneous membership program.
6. **Guaranteed Reserve Forces Duty:** Open to all majors, it allows cadets to compete for either Army Reserve or Army National Guard duty. Cadets must enter into the simultaneous membership program.

All scholarships are competitive and are funding dependent. Once the scholarship is awarded, a military service obligation is incurred.

Cook Honors College

Website: www.iup.edu/honors

Chauna J. Craig, Interim Director

The Cook Honors College is IUP's university-wide honors program for undergraduate students of all majors who are accepted into the program. Its goal is to provide a unique educational environment in which students of high ability and motivation can achieve their potential in a nurturing learning community of fellow students and professors. The Cook Honors College makes an intentional effort to see that students and faculty members are provided with integrated courses, an appreciation for multiple perspectives on important issues, and common learning experiences wherever possible; it strives to see that the learning community remains cohesive with both academic and cocurricular components throughout the four years of the student's honors experience.

The Cook Honors College provides a challenging opportunity for academic and personal development through an integrated program of curriculum, residence, and cocurricular activities. Whitmyre Hall is a combined honors residential/academic facility that includes classrooms and program offices as well as student rooms and cocurricular spaces.

Students in any academic major may apply for admission to the Cook Honors College. Students may enter the program as freshmen or later as sophomore "transfer" students from either another university or from IUP. An application is required and is evaluated by the Cook Honors College Admissions Committee.

Program Requirements

All first-year students are required to live in Whitmyre Hall and are encouraged to remain in the honors residence hall throughout their undergraduate career as space permits. Exceptions to the freshman residency requirements will be made only for nontraditional students (students 25 or older or who are married and/or have children).

Application for exemption from this residency requirement should be made in the form of a letter to the Cook Honors College director at the time of application to the program.

Cook Honors College students are required to maintain a cumulative 3.25 GPA. A student who falls below the 3.25 GPA will have one semester of Cook Honors College probation during which he/she may attempt to raise the GPA to 3.25 and remain in good standing. Students who are dismissed from the Cook Honors College due to GPA may apply for readmission after having raised the GPA to acceptable honors standards.

Requirements for Students Admitted as Freshmen

Applicants interested in further information are invited to contact the Cook Honors College Admissions office at 800-487-9122 or 724-357-4971.

Colleges and Departments

Indiana University of Pennsylvania

Other Degrees

Knowledge Area

Humanities: 9

Three Courses

*One course in history, one in literature, and one in philosophy or religious studies.

History:

- HIST 196 - Explorations in US History **Credits: 3**
- HIST 197 - Explorations in European History **Credits: 3**
- HIST 198 - Explorations in Global History **Credits: 3**

Literature:

- ENGL 121 - Humanities Literature **Credits: 3**
- ENGL 122 - Introduction to English Studies **Credits: 3** (English majors)
- FNLG 121 - Humanities Literature **Credits: 3** (taught in English)
- MUHI 102 - Music and Literature Survey **Credits: 3** (music education majors only)

Philosophy or Religious Studies:

- PHIL 100 - Introduction to Philosophy **Credits: 3**
- PHIL 101 - Critical Thinking **Credits: 3**
- PHIL 122 - Contemporary Moral Issues **Credits: 3**
- PHIL 130 - Introduction to Biomedical Ethics **Credits: 3**
- PHIL 223 - Philosophy of Art **Credits: 3**
- PHIL 240 - Philosophy and the Good Life **Credits: 3**
- RLST 100 - Introduction to Religion **Credits: 3**
- RLST 110 - World Religions **Credits: 3**
- RLST 120 - Comparative Religious Ethics **Credits: 3 (GMA)**

Fine Arts: 3

One Course from List

- ARHI 101 - Introduction to Art **Credits: 3**
- DANC 102 - Introduction to Dance **Credits: 3**
- FIAR 101 - Introduction to Fine Arts **Credits: 3**
- MUHI 101 - Introduction to Music **Credits: 3**
- MUHI 102 - Music and Literature Survey **Credits: 3** (music education majors only)
- THTR 101 - Introduction to Theatre **Credits: 3**
- THTR 161 - Introduction to Theatre: Interpersonal Practices **Credits: 3**

Natural Science: 7-8

One Option

Option I: Two-Semester Laboratory Course Sequence: 8

Two courses with laboratories (4cr each) from the Natural Science Laboratory course list. These two courses do not have to be taken in sequence.

Natural Science Laboratory Courses:

BIOL 103 - Life on Earth **Credits: 4**
BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**
BIOL 106 - Human Genetics and Health **Credits: 3**
BIOL 116 - Human Genetics and Health Laboratory **Credits: 1**
CHEM 101 - College Chemistry I **Credits: 4**
CHEM 102 - College Chemistry II **Credits: 4**
CHEM 111 - General Chemistry I **Credits: 4**
CHEM 112 - General Chemistry II **Credits: 4**
CHEM 113 - Advanced General Chemistry I **Credits: 4**
CHEM 114 - Advanced General Chemistry II **Credits: 4**

GEOS 101 - The Dynamic Earth **Credits: 3** and
GEOS 102 - The Dynamic Earth Lab **Credits: 1**

GEOS 103 - Oceans and Atmospheres **Credits: 3** and
GEOS 104 - Oceans and Atmospheres Lab **Credits: 1**

GEOS 105 - Exploring the Universe **Credits: 3** and
GEOS 106 - Exploring the Universe Lab **Credits: 1**

GEOS 111 - Earth and Environmental Systems **Credits: 4**
GEOS 201 - Foundations of Geology **Credits: 4**
GEOS 203 - Surficial Processes **Credits: 4**
GEOS 204 - Historical Geology **Credits: 4**

PHYS 111 - Physics I Lecture **Credits: 3** and
PHYS 121 - Physics I Lab **Credits: 1**

PHYS 112 - Physics II Lecture **Credits: 3** and
PHYS 122 - Physics II Lab **Credits: 1**

PHYS 131 - Physics I-C Lecture **Credits: 3** and
PHYS 141 - Physics I-C Lab **Credits: 1**

PHYS 132 - Physics II-C Lecture **Credits: 3** and
PHYS 142 - Physics II-C Lab **Credits: 1**

PHYS 151 - Medical Physics Lecture **Credits: 3** and
PHYS 161 - Medical Physics Lab **Credits: 1**

SCI 105 - Physical Science I **Credits: 4**

SCI 107 - Chemistry for Everyone **Credits: 3** and
SCI 117 - Chemistry for Everyone Laboratory **Credits: 1**

Option II: One Laboratory plus One Non-laboratory Course: 7

One course with laboratory (4cr) from the Natural Science Laboratory course list and one course (3cr) from Natural Science Non-laboratory course list.

Natural Science Non-Laboratory Courses:

BIOL 106 - Human Genetics and Health **Credits: 3**
BIOL 107 - Introduction to Forensic Biology **Credits: 3**
BIOL 115 - Biotic Diversity of North America **Credits: 3**
BIOL 117 - Understanding HIV Biology and AIDS **Credits: 3**
BIOL 118 - The History of Pain **Credits: 3**

BIOL 119 - Emerging Diseases **Credits: 3**
CHEM 105 - The Forensic Chemistry of CSI **Credits: 3**
CHEM 255 - Biochemistry for Health Sciences **Credits: 3**
GEOS 101 - The Dynamic Earth **Credits: 3**
GEOS 103 - Oceans and Atmospheres **Credits: 3**
GEOS 105 - Exploring the Universe **Credits: 3**
GEOS 119 - Geology of Energy Resources **Credits: 3**
GEOS 150 - Geology of National Parks **Credits: 3**
GEOS 151 - The Age of Dinosaurs **Credits: 3**
GEOS 152 - Physical Resources of the Earth **Credits: 3**
GEOS 154 - Human Exploration of Space **Credits: 3**
GEOS 155 - Geology of Climate Change **Credits: 3**
GEOS 156 - Geology of Natural Disasters **Credits: 3 (GMA)**
PHYS 101 - Energy and Our Environment **Credits: 3**
PHYS 105 - The Physics of Light and Sound **Credits: 3**
PHYS 111 - Physics I Lecture **Credits: 3**
PHYS 112 - Physics II Lecture **Credits: 3**
PHYS 131 - Physics I-C Lecture **Credits: 3**
PHYS 132 - Physics II-C Lecture **Credits: 3**
PHYS 151 - Medical Physics Lecture **Credits: 3**
SCI 107 - Chemistry for Everyone **Credits: 3**
SCI 113 - Physics in Science Fiction **Credits: 3**

Social Science: 9

Three Courses from List

*No course prefix may be used more than once

ANTH 110 - Contemporary Anthropology **Credits: 3 (GMA)**
ANTH 211 - Cultural Anthropology **Credits: 3 (GMA)**
ANTH 213 - World Archaeology **Credits: 3 (GMA)**
CRIM 101 - Crime and Justice Systems **Credits: 3**
ECON 101 - Basic Economics **Credits: 3**
ECON 121 - Principles of Macroeconomics **Credits: 3**
GEOG 101 - Environment and Society **Credits: 3**
GEOG 102 - Geography of the United States and Canada **Credits: 3**
GEOG 104 - World Geography: Global Context **Credits: 3 (GMA)**
JRNL 105 - Journalism and the Mass Media **Credits: 3**
PLSC 101 - World Politics **Credits: 3 (GMA)**
PLSC 111 - American Government **Credits: 3**
PSYC 101 - General Psychology **Credits: 3**
RGPL 103 - Global Cities: Planning and Development **Credits: 3 [same as GEOG 103] (GMA)**
SOC 151 - Principles of Sociology **Credits: 3**
SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3 (GMA)**
SOC 231 - Contemporary Social Problems **Credits: 3**

Dimensions of Wellness: 3

One Course

COMM 143 - Media Wellness **Credits: 3**
COSC 143 - Cyber Wellness **Credits: 3**
ECON 143 - Financial Wellness **Credits: 3**
FCSE 143 - Financial Wellness **Credits: 3**

FDNT 143 - Current Issues in Nutrition and Wellness **Credits: 3**
FIN 143 - Financial Wellness **Credits: 3**
KHSS 143 - Wellness **Credits: 3**
NURS 143 - Healthy People—Promoting Wellness **Credits: 3**

An alternate method of fulfilling this requirement is the completion of one year of Military Science/ROTC: MLSC 101 - Introduction to Military Science (2cr) and MLSC 102 - Fundamentals of Military Science (2cr). Verified successful completion of Basic Training in any US Armed Service is transferable as MLSC 101 and MLSC 102. MLSC 203 and MLSC 204 may be substituted for MLSC 101 and MLSC 102.

Global and Multicultural Awareness: 3

Students must fulfill this requirement by completing one course. Most of the courses will at the same time fulfill other requirements set by Liberal Studies or in some cases by a college or department. These include courses from Natural Science, Social Science, and Liberal Studies Electives and are identified by GMA following their titles.

In addition, the following courses can be used to fulfill Global and Multicultural Awareness requirement only.

ECON 338 - Poverty in Africa **Credits: 3**
ECON 339 - Economic Development I **Credits: 3**
ECON 345 - International Trade **Credits: 3**
ECON 346 - International Finance **Credits: 3**
GEOG 252
MGMT 350 - International Business **Credits: 3**
MKTG 350 - International Business **Credits: 3**
MGMT 451 - International Management **Credits: 3**
MGMT 454 - International Competitiveness **Credits: 3**
PLSC 285 - Comparative Government II: Non-Western Political Systems **Credits: 3**
SPAN 244 - Modern Mexico **Credits: 3**
SPAN 344 - Spanish-American Cultures from the 19th Century to the Present **Credits: 3**
SPAN 364 - Survey of Spanish-American Literature **Credits: 3**
WGS 301 - Asian American and Asian Diasporic Women's Literature **Credits: 3**

Certain Study Abroad programs in Global and Multicultural Awareness areas are offered. For more information, visit the Office of International Education.

Learning Skills

English Composition: 6

Two Courses

ENGL 101 - Composition I **Credits: 3**
ENGL 202 - Composition II **Credits: 3** (sophomore standing)

Mathematics: 3-4

MATH 101 - Foundations of Mathematics **Credits: 3**
MATH 105 - College Algebra **Credits: 3**
MATH 107 - Business Mathematics **Credits: 3** (1)
MATH 108 - Applications of Business Mathematics **Credits: 1** (1)
MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**
MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3**

MATH 151 - Elements of Mathematics I **Credits:** 3 (1)
MATH 217 - Probability and Statistics **Credits:** 3

Note

(1) Restricted to designated majors

Liberal Studies Electives

No course carrying the student's major prefix may be used.

No course prefix may be used more than once, except for intermediate-level foreign language prefixes (CHIN, FRNC, GRMN, JAPN, KORE, and SPAN), which may be used twice.

Refer to program of study for specific requirements.

Courses: 6cr

Global Citizenship

ANTH 271 - Cultural Area Studies: Africa **Credits:** 3 (GMA)
ANTH 272 - Culture Area: China **Credits:** 3 (GMA)
ANTH 274 - Cultural Area Studies: Latin America **Credits:** 3 (GMA)
ANTH 310 - Voyages of Discovery **Credits:** 3 (GMA)
ANTH 314 - Contemporary Native American Cultures **Credits:** 3 (GMA)
ANTH 350 - Anthropology of Gender **Credits:** 3 (GMA)
ANTH 365 - Native North American Religions **Credits:** 3 (GMA)
ANTH 370 - Latinos and Diasporas **Credits:** 3 (GMA)
ANTH 430 - Anthropology of Food **Credits:** 3 (GMA)
CDFR 218 - Child Development **Credits:** 3
CDFR 224 - Marriage and Family Relations **Credits:** 3
COMM 230 - Global Media and Communication **Credits:** 3
COMM 325 - Gender in Media **Credits:** 3
ECON 122 - Principles of Microeconomics **Credits:** 3
GEOG 230 - Cultural Geography **Credits:** 3
GEOG 231 - Economic Geography **Credits:** 3
GEOG 254 - Geography of Russia, Central Eurasia, and Eastern Europe **Credits:** 3
GEOG 255 - Geography of Africa **Credits:** 3
GEOG 257 - Geography of South and Southwest Asia **Credits:** 3
HIST 313 - Europe Since 1945: Division, Revolution, and Unity **Credits:** 3
HIST 365 - History of Black America since Emancipation **Credits:** 3
HIST 385 - People in Nature: An Introduction to Environmental History **Credits:** 3
LAS 480 - Latin American Studies Seminar **Credits:** 3
MUHI 223 - Musical Cultures from Around the World **Credits:** 3
MUHI 301 - Music History I **Credits:** 3
MUHI 333 - History of Popular Music Since 1945 **Credits:** 3
PHIL 270 - Ethics and the Environment **Credits:** 3
PHIL 323 - Political Philosophy **Credits:** 3
PHIL 324 - Ancient Greek Philosophy **Credits:** 3
PHIL 450 - Philosophy of Law **Credits:** 3
PLSC 389 - International Development Strategies **Credits:** 3
PSYC 225 - Abnormal Psychology **Credits:** 3
PSYC 378 - Psychology of Death and Dying **Credits:** 3
RLST 311 - Eastern Philosophy **Credits:** 3
RLST 365 - Native North American Religions **Credits:** 3
RLST 370 - Religions: China and Japan **Credits:** 3

RLST 374 - Buddhism **Credits: 3 (GMA)**
RLST 380 - Islam **Credits: 3**
RLST 385 - Christianity **Credits: 3**
RLST 388 - Interpreting the Bible **Credits: 3**
SOC 251 - Sociology of Human Sexuality **Credits: 3**
SOC 314 - Sociology of Native Americans **Credits: 3**
SOC 337 - Society, Globalization, and Risk **Credits: 3**
SOC 361 - Social Stratification **Credits: 3**
SOC 362 - Racial and Ethnic Minorities **Credits: 3**
SOC 363 - Sociology of Gender **Credits: 3**
SUST 201 - Introduction to Sustainability Studies **Credits: 3**
WGS 200 - Introduction to Women's and Gender Studies **Credits: 3**

Information Literacy

ASIA 106 - Samurai and Gongfu Heroes: Masculinity in East Asia **Credits: 3**
ASIA 200 - Introduction to Asian Studies **Credits: 3**
ARHI 205 - Ancient to Medieval Art **Credits: 3**
ARHI 224 - Introduction to Asian Art **Credits: 3**
ARHI 427 - Japanese Narrative Art **Credits: 3**
COMM 101 - Introduction to Communications, Media, and Culture **Credits: 3**
COMM 201 - Internet and Multimedia **Credits: 3**
COMM 261 - Teamwork and Communication Skills for College and Career **Credits: 3**
COMM 325 - Gender in Media **Credits: 3**
COMM 380 - The History of African Americans in Film **Credits: 3**
COMM 420 - Media Portrayal of Crime **Credits: 3**
CRIM 420 - Media Portrayal of Crime **Credits: 3**
EDSP 102 - Educational Psychology **Credits: 3**
FCSE 315 - Consumer Economics and Family Finance **Credits: 3**
FDNT 145 - Personal Nutrition **Credits: 3**
HIST 106 - Samurai and Gongfu Heroes: Masculinity in East Asia **Credits: 3**
HIST 206 - The History of East Asia **Credits: 3**
HIST 207 - The History of the Middle East **Credits: 3**
HIST 230 - Queer Global History **Credits: 3**
HIST 231 - History of Jerusalem **Credits: 3**
HIST 232 - Stalin and Hitler and the Terror State **Credits: 3**
HIST 240 - Zombies: A Cultural History of Death, Disease, and Technology **Credits: 3**
HIST 265 - The History of Power: Its Uses and Abuses **Credits: 3**
HIST 305 - Renaissance and Reformation **Credits: 3**
HIST 306 - Early Modern Europe **Credits: 3**
HIST 323 - France, 1815 to the Present **Credits: 3**
HIST 332 - History of Early China **Credits: 3**
HIST 338 - The History of Iran **Credits: 3**
HIST 348 - Top Secret America: The Rise and Reach of the National Security State **Credits: 3**
HIST 360 - History of Pennsylvania **Credits: 3**
HIST 365 - History of Black America since Emancipation **Credits: 3**
HIST 374 - History of Organized Crime **Credits: 3**
HIST 433 - China 1300-1800: The Late Imperial Age **Credits: 3**
HIST 434 - Modern China 1800-present **Credits: 3**
HIST 436 - Japan 1500-1850: Early Modern Japan **Credits: 3**
HIST 437 - Modern Japan 1850-Present **Credits: 3**
IFMG 110 - Business Spreadsheet Computing **Credits: 3**
JRNL 375 - World News Coverage **Credits: 3**
KHSS 225 - Social Issues in Sport **Credits: 3**
LIBR 201 - Internet and Multimedia **Credits: 3**
LIBR 251 - Information Access in the Digital Age **Credits: 2**
MUHI 301 - Music History I **Credits: 3**

MUHI 302 - Music History II **Credits: 3**
PLSC 251 - State and Local Political Systems **Credits: 3**
PLSC 348 - Top Secret America: The Rise and Reach of the National Security State **Credits: 3**
RLST 385 - Christianity **Credits: 3**
RLST 388 - Interpreting the Bible **Credits: 3**
SAFE 100 - The Science of Living Safely **Credits: 3**
SOC 269 - Sociology of Deviance **Credits: 3**
THTR 313 - American Theater Between the Wars **Credits: 3**

Oral Communication

CHIN 102 - Elementary Chinese II **Credits: 4**
CHIN 201 - Intermediate Chinese **Credits: 4**
COMM 261 - Teamwork and Communication Skills for College and Career **Credits: 3**
FRNC 102 - Basic French II **Credits: 4**
FRNC 201 - Intermediate French **Credits: 4**
GRMN 102 - Elementary German II **Credits: 4**
GRMN 201 - Intermediate German **Credits: 4**
GRMN 220 - Intermediate German Conversation **Credits: 3**
JAPN 102 - Elementary Japanese II **Credits: 4**
JAPN 201 - Intermediate Japanese **Credits: 4**
JRNL 361 - Presentation Making **Credits: 3**
KORE 102 - Elementary Korean II **Credits: 4**
KORE 201 - Intermediate Korean **Credits: 4**
RLST 385 - Christianity **Credits: 3**
RLST 388 - Interpreting the Bible **Credits: 3**
SPAN 102 - Elementary Spanish II **Credits: 4**
SPAN 201 - Intermediate Spanish **Credits: 4**
SPAN 220 - Intermediate Spanish Conversation **Credits: 3**
THTR 132 - Introduction to Acting **Credits: 3**
THTR 313 - American Theater Between the Wars **Credits: 3**

Quantitative Reasoning

ECON 122 - Principles of Microeconomics **Credits: 3**
ECON 239 - Economics of Sports **Credits: 3**
FCSE 315 - Consumer Economics and Family Finance **Credits: 3**
LAS 350 - The Mayas: Culture, Literature, and Numbers **Credits: 3**
MATH 122 - Calculus II for Natural and Social Sciences **Credits: 4**
MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3**
MATH 152 - Elements of Mathematics II **Credits: 3**
MATH 214 - Probability and Statistics for Business Majors **Credits: 3**
MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**
MATH 217 - Probability and Statistics **Credits: 3**
MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits: 3**
MATH 341 - Differential Equations **Credits: 3**

Scientific Literacy

ANTH 250 - Human Origins **Credits: 3**
FCSE 315 - Consumer Economics and Family Finance **Credits: 3**
PHIL 330 - Philosophy of Science **Credits: 3**
PSYC 215 - Developmental Psychology **Credits: 3**
PSYC 235 - Social Psychology **Credits: 3**
SAFE 100 - The Science of Living Safely **Credits: 3**

Technology Literacy

COSC 101 - Computer Literacy **Credits: 3**

FCSE 315 - Consumer Economics and Family Finance **Credits: 3**

GEOG 105 - Our Digital Earth: Mobile Devices, Web Applications, and Geospatial Technology **Credits: 3**

HIST 230 - Queer Global History **Credits: 3**

HIST 240 - Zombies: A Cultural History of Death, Disease, and Technology **Credits: 3**

IFMG 101 - Computer Literacy **Credits: 3**

LIBR 251 - Information Access in the Digital Age **Credits: 2**

Liberal Studies Requirements

Learning Skills

Knowledge Area

Liberal Studies Electives

Writing Across the Curriculum

Requirements for Students Admitted as Freshmen

Required Courses: 18

HNRC 101 - Honors Core I **Credits: 5 (1)**

HNRC 102 - Honors Core II **Credits: 5 (1)**

HNRC 201 - Honors Core III **Credits: 4 (1)**

HNRC 202 - Honors Core: Sciences **Credits: 4 (2)**

Additional Honors Coursework/Experiential Education: 6

Completion of H-Designated Course **Credits: 3**

or

Departmental Honors Thesis **Credits: 3 (3)**

Completion of Experiential Education Requirement **Credits:3 (4)**

Cook Honors College Requirements: 24

(1) HNRC 101, HNRC 102, and HNRC 201 replace Liberal Studies requirements for Composition I (ENGL 101), and three humanities courses (ENGL 121; HIST 196, HIST 197, or HIST 198; and either RLST 100 or PHIL 120), and one fine arts course (either ARHI 101/MUHI 101/THTR 101 or DANC 102). In addition, students who complete honors units offered by social science departments will receive Liberal Studies social science credits for the appropriate corresponding departmental course.

(2) HNRC 202 replaces Liberal Studies requirements for either one non-laboratory science and one social science or two non-laboratory sciences or two social sciences, depending on the units selected.

(3) Departmental honors courses (H-designated courses) count toward the total number of honors credits required for Cook Honors College graduation. Students are also encouraged to complete an undergraduate thesis. Students may enroll for thesis credit by completing the necessary approval forms and scheduling HNRC 483 honors thesis/independent study or, in some departments, by scheduling a departmental honors thesis course

(4) Students are required to do at least one of the following experiential components: study abroad, internship, honors thesis, or independent study. In the absence of a suitable cocurricular experience, an additional graduate course may be substituted. This requirement may or may not be a credit-bearing experience.

Interdisciplinary Programs

The Interdisciplinary degree programs, minors, and certificates are multidisciplinary and are not specific to one university college

Minor

Business Administration (for Nonbusiness Majors) Minor

The ECOBIT offers, as a joint effort of its departments, a 21-credit minor for nonbusiness majors. The program is designed to give nonbusiness majors a general background in business with 12 credits of prescribed Liberal Studies courses and 21 credits of required business courses.

Prescribed Liberal Studies:

Mathematics:

MATH 214 - Probability and Statistics for Business Majors **Credits: 3**

or

MATH 217 - Probability and Statistics **Credits: 3**

Social Science:

ECON 121 - Principles of Macroeconomics **Credits: 3**

Liberal Studies Electives:

COSC 101 - Computer Literacy **Credits: 3**

or

IFMG 101 - Computer Literacy **Credits: 3**

or

IFMG 110 - Business Spreadsheet Computing **Credits: 3**

ECON 122 - Principles of Microeconomics **Credits: 3**

Required Business Courses: 15

ACCT 201 - Accounting Principles I **Credits: 3**

ACCT 202 - Accounting Principles II **Credits: 3**

FIN 310 - Fundamentals of Finance **Credits: 3**

MGMT 310 - Principles of Management **Credits: 3**

MKTG 320 - Principles of Marketing **Credits: 3**

Other Requirements: 6

Two of the following courses with advisement:

BCOM 321 - Business and Interpersonal Communications **Credits: 3**

BLAW 235 - Legal Environment of Business **Credits: 3**

IFMG 300 - Information Systems: Theory and Practice **Credits: 3**

MGMT 330 - Production and Operations Management **Credits: 3**

Total Minor Requirements: 21

Business Administration (for Nonbusiness Majors) Minor

The ECOBIT offers, as a joint effort of its departments, a 21-credit minor for nonbusiness majors. The program is designed to give nonbusiness majors a general background in business with 12 credits of prescribed Liberal Studies courses and 21 credits of required business courses.

Prescribed Liberal Studies:

Mathematics:

MATH 214 - Probability and Statistics for Business Majors **Credits: 3**

or

MATH 217 - Probability and Statistics **Credits: 3**

Social Science:

ECON 121 - Principles of Macroeconomics **Credits: 3**

Liberal Studies Electives:

COSC 101 - Computer Literacy **Credits: 3**

or

IFMG 101 - Computer Literacy **Credits: 3**

or

IFMG 110 - Business Spreadsheet Computing **Credits: 3**

ECON 122 - Principles of Microeconomics **Credits: 3**

Required Business Courses: 15

ACCT 201 - Accounting Principles I **Credits: 3**

ACCT 202 - Accounting Principles II **Credits: 3**

FIN 310 - Fundamentals of Finance **Credits: 3**

MGMT 310 - Principles of Management **Credits: 3**

MKTG 320 - Principles of Marketing **Credits: 3**

Other Requirements: 6

Two of the following courses with advisement:

BCOM 321 - Business and Interpersonal Communications **Credits: 3**

BLAW 235 - Legal Environment of Business **Credits: 3**

IFMG 300 - Information Systems: Theory and Practice **Credits: 3**

MGMT 330 - Production and Operations Management **Credits: 3**

Total Minor Requirements: 21

Child and Adult Advocacy Studies (CAAST) for Majors other than Psychology and Sociology Minor

Child and Adult Advocacy Studies is an 18-credit interdisciplinary undergraduate minor. It is designed for current undergraduate students enrolled at IUP. It provides mandated reporters and first responders in criminology, education, family studies, medicine, nursing, psychology, public health, sociology, social work, and other disciplines with evidence-based, culturally relevant knowledge and skills to improve the outcomes for victims and perpetrators of interpersonal violence across the lifespan. A student's major determines which CAAST minor s/he pursues: one minor has been designed for Psychology majors, one minor has been designed for Sociology majors, and one minor has been designed for all other majors.

Required Courses:

PSYC 101 - General Psychology **Credits: 3 (1)**
PSYC 322 - Violence Across the Life Span **Credits: 3**
SOC 151 - Principles of Sociology **Credits: 3 (1)**
or
SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3 (1)**
SOC 391 - Foundations of Sociological Practice **Credits: 3**
SOC 392 - Clinical Sociological Practice **Credits: 3**

Controlled Electives: 9

(2) Three additional courses from the following:

PSYC 313 - Non-normative Development in Adulthood (CAAST) **Credits: 3**
or
PSYC 314 - Child and Adolescent Psychopathology (CAAST) **Credits: 3**
PSYC 332 - Community Psychology and Prevention Science (CAAST) **Credits: 3**
PSYC 380 - Gender and Violence **Credits: 3**
SOC 357 - Sociology of Aging and the Life-course **Credits: 3**
SOC 427 - Social Perspectives on Intimate Partner Violence **Credits: 3**
SOC 428 - Child Abuse **Credits: 3**

Total Minor Requirements: 18

(1) Credits counted in Liberal Studies, not in the minor.

(2) With the aid of a CAAST minor advisor, students will select classes (a) from both PSYC and SOC, and (b) that will cover the spectrum of violence across the lifespan.

Child and Adult Advocacy Studies (CAAST) for Psychology Majors Minor

(1, 2)

Child and Adult Advocacy Studies is an 18-credit interdisciplinary undergraduate minor. It is designed for current undergraduate students enrolled at IUP. It provides mandated reporters and first responders in criminology, education, family studies, medicine, nursing, psychology, public health, sociology, social work, and other disciplines with evidence-based, culturally relevant knowledge and skills to improve the outcomes for victims and perpetrators of interpersonal violence across the lifespan. A student's major determines which CAAST minor s/he pursues: one minor has been designed for Psychology majors, one minor has been designed for Sociology majors, and one minor has been designed for all other majors.

Required Courses:

PSYC 101 - General Psychology **Credits: 3 (3)**
PSYC 322 - Violence Across the Life Span **Credits: 3**

SOC 151 - Principles of Sociology **Credits:** 3 (3)

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits:** 3 (3)

SOC 391 - Foundations of Sociological Practice **Credits:** 3

SOC 392 - Clinical Sociological Practice **Credits:** 3

Controlled Electives:

Psychology Course

One additional PSYC Course from the following:

PSYC 313 - Non-normative Development in Adulthood (CAAST) **Credits:** 3

PSYC 314 - Child and Adolescent Psychopathology (CAAST) **Credits:** 3

PSYC 332 - Community Psychology and Prevention Science (CAAST) **Credits:** 3

PSYC 380 - Gender and Violence **Credits:** 3

PSYC 493 - Psychological Practicum **Credits:** 1-12

Sociology Courses

Two additional SOC Courses from the following:

SOC 357 - Sociology of Aging and the Life-course **Credits:** 3

SOC 427 - Social Perspectives on Intimate Partner Violence **Credits:** 3

SOC 428 - Child Abuse **Credits:** 3

Total Minor Requirements: 18

(1) Students majoring in Sociology/Human Services Track are not eligible to take this minor; instead, they must take the CAAST minor that has been designed for students pursuing a major in Sociology/Human Services Track.

(2) Students who are Psychology majors can only have two PSYC courses that count for their major and the CAAST minor.

(3) Credits counted in Liberal Studies, not in the minor.

Child and Adult Advocacy Studies (CAAST) for Sociology/Human Services Track majors Minor

(1, 2, 3)

Child and Adult Advocacy Studies is an 18-credit interdisciplinary undergraduate minor. It is designed for current undergraduate students enrolled at IUP. It provides mandated reporters and first responders in criminology, education, family studies, medicine, nursing, psychology, public health, sociology, social work, and other disciplines with evidence-based, culturally relevant knowledge and skills to improve the outcomes for victims and perpetrators of interpersonal violence across the lifespan. A student's major determines which CAAST minor s/he pursues: one minor has been designed for Psychology majors, one minor has been designed for Sociology majors, and one minor has been designed for all other majors.

Required Courses:

PSYC 101 - General Psychology **Credits:** 3 (4)

PSYC 313 - Non-normative Development in Adulthood (CAAST) **Credits:** 3

or

PSYC 314 - Child and Adolescent Psychopathology (CAAST) **Credits:** 3

PSYC 322 - Violence Across the Life Span **Credits:** 3

PSYC 332 - Community Psychology and Prevention Science (CAAST) **Credits: 3**

PSYC 380 - Gender and Violence **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3 (4)**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3 (4)**

Controlled Electives: 6

Two courses from the following:

SOC 357 - Sociology of Aging and the Life-course **Credits: 3**

SOC 427 - Social Perspectives on Intimate Partner Violence **Credits: 3**

SOC 428 - Child Abuse **Credits: 3**

Total Minor Requirements: 18

(1) Students majoring in Psychology are not eligible to take this minor; instead, they must take the CAAST minor that has been designed for students pursuing a major in Psychology.

(2) Students who are Sociology/Human Services Track majors can only have two SOC courses that count for their major and the CAAST minor.

(3) Sociology/General Track majors who wish to get a CAAST minor must take SOC 391 and SOC 392 as part of their free electives.

(4) Credits counted in Liberal Studies, not in the minor.

Cyber Security Minor

(1)

Required Courses:

COSC 110 - Problem Solving and Structured Programming **Credits: 3 (2)**

or

Controlled Elective (see below)

COSC 216 - Introduction to Cyber Security **Credits: 3 (3)**

COSC 345 - Computer Networks **Credits: 3 (4)**

or

IFMG 352 - LAN Design and Installation **Credits: 3**

CRIM 101 - Crime and Justice Systems **Credits: 3 (5)**

or

CRIM 102 - Survey of Criminology **Credits: 3 (5)**

or

Controlled Elective (see below)

CRIM 321 - Cybersecurity and Loss Prevention **Credits: 3**

or

CRIM 323 - Cybersecurity and the Law **Credits: 3**

Controlled Electives:

Select at least 3cr from the following:

COSC 341 - Introduction to Database Management Systems **Credits: 3**
COSC 356 - Network Security **Credits: 3**
COSC 362 - Unix Systems **Credits: 3**
COSC 427 - Introduction to Cryptography **Credits: 3**
COSC 429 - Digital Forensics **Credits: 3**
COSC 430 - Introduction to Systems Programming **Credits: 3**
COSC 432 - Introduction to Operating Systems **Credits: 3**
COSC 454 - Information Assurance Administration **Credits: 3**
CRIM 321 - Cybersecurity and Loss Prevention **Credits: 3**
CRIM 323 - Cybersecurity and the Law **Credits: 3**
CRIM 401 - Contemporary Issues in Criminology **Credits: 3**
CRIM 403 - Dilemmas in Criminology and Criminal Justice **Credits: 3**

Total Minor Requirements: 18

- (1) At most 6cr of a student's major can be counted towards both the major and minor. Computer Science/Cyber Security students are not eligible to take this minor; instead, they must take a Criminology minor.
- (2) Students with COSC 110 (or equivalent such as IFMG 210) as part of their major must take 3 credits from the controlled elective list.
- (3) Computer science majors cannot count COSC 216 for both their major and minor.
- (4) Computer Science majors cannot count COSC 352 or IFMG 352. Computer Science majors must take COSC 345.
- (5) Students with CRIM 101 or CRIM 102 as part of their major must take 3 credits from the controlled elective list.

Global Health Minor

(2, 5)

Global health is an area for study, research, and practice that places a priority on improving health and achieving health equity for all people worldwide. The Global Health minor will equip students interested in health and medicine with the analytical and critical-thinking skills needed to understand, explain, and critique health inequalities. They will recognize how these health disparities result from globalization and the need for promoting health equity in areas of the world with under-resourced and constrained health care. The minor is organized around six global health pathways:

- food, nutrition, and hunger
- environmental justice
- law, ethics, and policy
- disaster, conflict, and displacement
- gender, sexuality, and reproductive health
- aging

Students will select one of the six pathways and will complete 12 credits in the selected pathway, in addition to Introduction to Global Health and either Medical Anthropology or Medical Sociology.

Health topics, theories, and research methods as addressed in the social sciences will advance students' interdisciplinary understandings of health disparities, with a corresponding awareness of health equity. Practicums, through field school participation, internships, and other experiential learning opportunities, will merge course material with real world praxis, and will provide students with greater insights into global health and its contributions. The Global Health minor will prepare students for graduate studies in health-related fields and careers in health-promoting governmental agencies and non-governmental organizations (NGOs). Ethnographic field school, independent study courses, and internship courses may be applied to each global health pathway with the approval of the Global Health minor committee. Students should consult with the program coordinator to determine if there are any prerequisites for the courses listed below. The program coordinator will work with individual departments to determine if students may qualify for prerequisite exemptions. Course substitutions will be permitted with the approval of the Global Health minor committee.

Core Courses: 6

ANTH 240 - Introduction to Global Health **Credits: 3**
ANTH 444 - Medical Anthropology **Credits: 3**
or
SOC 442 - Medical Sociology **Credits: 3**

Select one Global Health Pathway: 12

Food, Nutrition, and Hunger

(7 courses, choose 4) (3, 4)

At least one course must have a FDNT prefix.

The courses in this pathway offer the students an interdisciplinary perspective that will provide students with the analytical tools to examine world needs associated with food, nutrition, and health.

ANTH 430 - Anthropology of Food **Credits: 3**
ECON 360 - Health Economics **Credits: 3**
ECON 362 - Global Poverty and Health **Credits: 3**
FDNT 143 - Current Issues in Nutrition and Wellness **Credits: 3 (1)**
or
NURS 143 - Healthy People—Promoting Wellness **Credits: 3 (1)**
FDNT 415 - Sustainable Nutrition **Credits: 3**
FDNT 470 - Human Food Consumption Patterns **Credits: 3**
SOC 337 - Society, Globalization, and Risk **Credits: 3**

Environmental Justice

(7 courses, choose 4) (3, 4)

The courses in this pathway offer the students an interdisciplinary perspective that will provide students with the analytical tools to examine the linkages between environmental issues in the world and health.

ANTH 420 - Environmental Anthropology **Credits: 3**
BIOL 221 - Environmental Health and Protection **Credits: 4**
ECON 362 - Global Poverty and Health **Credits: 3**
FDNT 415 - Sustainable Nutrition **Credits: 3**
GEOG 343 - Fresh Water Resources **Credits: 3**
or
RGPL 343 - Fresh Water Resources **Credits: 3**
PHIL 270 - Ethics and the Environment **Credits: 3**
SOC 417 - Global Service Learning **Credits: 3**

Law, Ethics, and Policy

(9 courses, choose 4) (3, 4)

The courses in this pathway will allow students to learn about using law and ethics to develop and advocate for legislation and policies designed to address social injustice and improve health in the world.

ANTH 352 - The Anthropology of Human Rights **Credits: 3**
ANTH 457 - Applied Anthropology **Credits: 3**
ECON 360 - Health Economics **Credits: 3**
ECON 362 - Global Poverty and Health **Credits: 3**
NURS 314 - Health Policy and Law **Credits: 3**
or

ELR 314 - Health Policy and Law **Credits: 3**
PHIL 130 - Introduction to Biomedical Ethics **Credits: 3**
PLSC 405 - Sexuality and Law **Credits: 3**
SOC 362 - Racial and Ethnic Minorities **Credits: 3**
SOC 452 - Disability and Society **Credits: 3**

Disasters, Conflicts, and Displacement

(6 courses, choose 4) (3, 4)

The courses in this pathway will offer the students an interdisciplinary perspective to examine natural disasters and armed conflicts that result in displacement and poor health in many parts of the globe.

ANTH 352 - The Anthropology of Human Rights **Credits: 3**
ANTH 370 - Latinos and Diasporas **Credits: 3**
PSYC 378 - Psychology of Death and Dying **Credits: 3**
RGPL 103 - Global Cities: Planning and Development **Credits: 3**
SOC 337 - Society, Globalization, and Risk **Credits: 3**

Gender, Sexuality, and Reproductive Health

(10 courses, choose 4) (3, 4)

The courses in this pathway will offer the students an interdisciplinary perspective that will provide students with the analytical tools to examine gender, sexuality, and related health issues as well as reproductive health knowledge and services in the world.

ANTH 350 - Anthropology of Gender **Credits: 3**
BIOL 117 - Understanding HIV Biology and AIDS **Credits: 3**
KHSS 143 - Wellness **Credits: 3** (1)
ENGL 336 - Language, Gender, and Society **Credits: 3**
LGBT 200 - Introduction to Lesbian, Gay, Bisexual, Transgender, and Queer Studies **Credits: 3**
PLSC 405 - Sexuality and Law **Credits: 3**
PSYC 379 - Psychology of Human Sexuality **Credits: 3**
SOC 251 - Sociology of Human Sexuality **Credits: 3**
SOC 363 - Sociology of Gender **Credits: 3**
SOC 410 - Men and Masculinities **Credits: 3**

Aging

(8 courses, choose 4) (3, 4)

The courses in this pathway will offer the students an interdisciplinary perspective that will provide students with the analytical tools to examine fundamentals of global aging and health.

ECON 362 - Global Poverty and Health **Credits: 3**
FDNT 410 - Food, Nutrition, and Aging **Credits: 3**
KHSS 350 - Health Aspects of Aging **Credits: 3**
PSYC 312 - Adult Development and Aging **Credits: 3**
PSYC 378 - Psychology of Death and Dying **Credits: 3**
SOC 357 - Sociology of Aging and the Life-course **Credits: 3**
SOC 452 - Disability and Society **Credits: 3**

Total Minor Requirements: 18

(1) Only one 143 Liberal Studies class may be taken in a student's entire program.

- (2) At least six credits in the selected pathway must be at the 300 level or above.
- (3) Only one 100-level course may count in the selected pathway.
- (4) Only two courses in the selected pathway may come from the student's major.
- (5) With the exception of GLOB courses, no course prefix may be used more than twice without written permission from the program director.

Pre-law Interdisciplinary Minor

Successful lawyers possess excellent skills in writing and speaking and can analyze a problem and explain its solution in clear, logical terms. The Pre-law minor prepares the student especially well in these areas and provides the skills and knowledge needed to do well in the law school admissions examination. This minor may be taken with any major other than those with a Pre-law Track. Although a pre-law minor is not required for law school admission, this interdisciplinary minor will provide students with the prerequisite skills for law school.

Seven Courses:

Seven courses, including at least one from each of the areas (no courses with student's major prefix):

Business:

ACCT 201 - Accounting Principles I **Credits: 3**
ACCT 202 - Accounting Principles II **Credits: 3**
BLAW 235 - Legal Environment of Business **Credits: 3**

Criminology:

CRIM 210 - Criminal Law **Credits: 3**
CRIM 215 - Survey of Courts and the Criminal Justice System **Credits: 3**
CRIM 225 - Survey of Corrections **Credits: 3**
CRIM 255 - Law, Social Control, and Society **Credits: 3**

Economics:

ECON 121 - Principles of Macroeconomics **Credits: 3**
ECON 122 - Principles of Microeconomics **Credits: 3**
ECON 332

English:

ENGL 212 - American Literature: Beginnings to 1900 **Credits: 3**
ENGL 227 - Introduction to Legal Writing **Credits: 3**
ENGL 265 - Law and Literature **Credits: 3**
ENGL 310 - Public Speaking **Credits: 3**
ENGL 321 - Persuasive Speech and Writing **Credits: 3**

History:

HIST 320 - History of England to 1688 **Credits: 3**
HIST 341 - American Revolution **Credits: 3**
HIST 342 - The Early Republic **Credits: 3**
HIST 346 - Recent United States History **Credits: 3**
HIST 475 - History of American Constitutionalism **Credits: 3**

Philosophy:

PHIL 101 - Critical Thinking **Credits: 3**
PHIL 122 - Contemporary Moral Issues **Credits: 3**
PHIL 130 - Introduction to Biomedical Ethics **Credits: 3**
PHIL 221 - Symbolic Logic I **Credits: 3**
PHIL 270 - Ethics and the Environment **Credits: 3**
PHIL 320 - Ethical Theory **Credits: 3**
PHIL 450 - Philosophy of Law **Credits: 3**

Political Science:

PLSC 358 - Judicial Process **Credits: 3**
PLSC 359 - Constitutional Law and Civil Liberties **Credits: 3**
PLSC 361 - Modern Political Thought **Credits: 3**
PLSC 405 - Sexuality and Law **Credits: 3**

Total Minor Requirements: 21

Professional Teamwork and Leadership Minor

The Professional Teamwork and Leadership minor is an interdisciplinary program that aims to better prepare students for a competitive job market by instilling interpersonal, teamwork, and communication skills for use in their field. Employers of today seek job candidates who possess a strong set of technical skills, but strongly prefer someone who can also work in a team environment. Ninety percent of employers believe that team skills are equally, or even more important, than technical skills when hiring. This minor provides students with ways to stand out from the crowd.

The minor is open to all IUP students and provides three pathways to best acquire the necessary team and leadership skills:

Applications of Teamwork and Leadership: Links the theory of teamwork and leadership to applications within your chosen field. Employers seek graduates who pursue opportunities to develop and apply their team and leadership skills through current, real-world problems that graduates will face during employment.

Business Leadership Theory: Explores top leadership theories and models, the motivation of teams, cooperate social responsibility, foundations of commercial sustainability, and corporate ethics in the regional and global marketplaces.

Community and Civic Leadership Theory: Explores the team and leadership theories regarding the evaluation and planning of services, managing, and motivating teams of volunteers while building intergovernmental and intraorganizational relationships.

Successful leaders have confidence in their abilities, are passionate, possess strong values, are excellent planners and organizers as well as effective communicators. These attributes are imperative to solving key problems. The minor will build students' identities as team members and leaders, transform and enhance their thought processes, and provide an expanded toolkit to cultivate effective teams.

The addition of the minor is practical for all majors, particularly those programs with few free electives looking to add more value and marketability. This minor will expose students to understanding how their beliefs, attitudes, and actions affect the team as well as how the diversity of the team adds strength and additional perspective to solve complex problems facing society. Students will learn how to engage audiences with nontechnical and technically rich content, frame and present arguments, and develop the ability to speak about their work and its significance. Traits of good team members and leaders will be examined and applied through case studies or by solving current, real-world problems in in-major projects within their required coursework. The capstone course, coupled with the teamwork intensive course, provides direct opportunities for students to develop and apply their team and leadership skills within their chosen field. Students will reflect on the personal qualities and attributes they bring to a team and prepare materials that best illustrate these skills to future employers.

Core Courses: 13

(1)

LDSP 461 - Leadership Capstone **Credits:** 1
MGMT 461 - Organizational Leadership Theory **Credits:** 3
SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits:** 3
THTR 161 - Introduction to Theatre: Interpersonal Practices **Credits:** 3
Any 100-level PHIL course **Credits:** 3

Select one Professional Teamwork and Leadership Pathway:

Applications of Teamwork and Leadership: 6-7

Links the theory of teamwork and leadership to applications within your chosen field. Employers seek graduates who pursue opportunities to develop and apply their team and leadership skills through current, real-world problems that graduates will face during employment.

COMM 261 - Teamwork and Communication Skills for College and Career **Credits:** 3

or

JRNL 361 - Presentation Making **Credits:** 3 (2)

A Teamwork-Intensive Course **Credits:** 3-4

Business Leadership Theory: 6

Explores top leadership theories and models, motivation of teams, cooperate social responsibility, foundations of commercial sustainability, and corporate ethics in the regional and global marketplaces. (3)

BCOM 321 - Business and Interpersonal Communications **Credits:** 3

MGMT 461 - Organizational Leadership Theory **Credits:** 3

Community and Civic Leadership Theory: 8-9

Explores the team and leadership theories regarding evaluation and planning of services, managing, and motivating teams of volunteers while building inter-governmental and intra-organizational relationships.

COMM 261 - Teamwork and Communication Skills for College and Career **Credits:** 3

or

JRNL 361 - Presentation Making **Credits:** 3

PLSC 370 - The Practice of Public Administration **Credits:** 3

or

PSYC 390 - Industrial-Organizational Psychology **Credits:** 3

or

SOC 345 - Interpersonal Dynamics **Credits:** 3

Total Minor Requirements:

(1) COMM 261, JRNL 361, PHIL 122, THTR 161, and SOC 161 can count as one or more liberal studies requirements. Honors College students can satisfy PHIL 122, THTR 161, and SOC 161 by taking the appropriate HRNC core courses. THTR 111 is a substitute for THTR 161.

(2) At least one course from pathway is required to be of 300-or 400-level coursework. If possible, take an in-major teamwork- intensive course, elective, or writing intensive requirement. Ensure the section chosen has the Teamwork-Intensive course attribute.

(3) Non-MGMT students in the Business Leadership Theory pathway may substitute the following courses for the core PHIL course: MGMT 311 or MGMT 432 .

Sustainability Studies Minor

The Sustainability Studies minor is an interdisciplinary program that draws from expertise across the university. The program conceptualizes "sustainability" as an interdisciplinary approach to knowledge production and action that focuses on "the health and integrity of human societies and the natural world." Sustainability is classically defined as a stool with three legs—the social, the economic, and the environmental. The purpose of this program is to address the challenges of sustainability by balancing the humanities, social sciences, and natural sciences. The minor equips students to broaden their thinking about the origins of sustainability problems and possible solutions to include human institutions, ethics, and cultures as well as technologies and natural sciences. In so doing, the minor aims to foster student agency with regard to research on sustainability, responsibility to both human and non-human life, and civic engagement with local sustainability projects. The minor can supplement all majors in the university. Career possibilities include positions in design, law, food industries, planning and architecture, education, building certification, renewable energy, and waste management.

Students must complete 18 credits and a capstone experience (described below) to earn a minor in sustainability studies. The program's interdisciplinary approach encourages students to take courses from a variety of departments. The program is structured as follows:

All students will take SUST 201 - Introduction to Sustainability Studies.

Students must then take at least 12 credits from Category A, defined as courses in which substantial content is foundational to engagement with sustainability. These credits must be distributed across three "clusters," each of which denotes a major aspect of sustainability. Having taken one course from each of the three clusters, students will then be able to take the remaining Category A credits from a cluster of their choosing.

Only 3 credits may come from Category B, defined as courses in which significant content is foundational to engagement with sustainability.

Because their content may vary, courses from Category B must be approved by the program director to count for the minor.

At least 6cr must be at the 300 level or above.

Only one course may come from the student's major.

With the exception of SUST courses, no course prefix may be used more than twice without written permission from the program director.

Special topics, independent study courses, and internship courses may be applied to either Category A or Category B with the approval of the Sustainability Studies Committee.

Students should consult with the program director to determine if there are any prerequisites for the courses. Through counseling, the program coordinator will work with individual departments to determine if students may qualify for prerequisite exemptions.

Students will work with an advisor from the Sustainability Studies program to develop a capstone experience that synthesizes their knowledge and skills related to sustainability. This requirement may be fulfilled by one of the following options: a portfolio, conference presentation, or other scholarly activity approved by the program director.

Required Course: 3

SUST 201 - Introduction to Sustainability Studies **Credits: 3**

Category A: 12-15

Cluster I: Ethics, Culture, and Society

ANTH 420 - Environmental Anthropology **Credits: 3**

ANTH 430 - Anthropology of Food **Credits: 3**

ANTH 470 - Environmental Archaeology **Credits: 3**

ENGL 361 - Environmental Literature **Credits: 3**

GEOG 230 - Cultural Geography **Credits: 3**

HIST 385 - People in Nature: An Introduction to Environmental History **Credits: 3**

PHIL 270 - Ethics and the Environment **Credits: 3**

RLST 365 - Native North American Religions **Credits: 3**

SOC 314 - Sociology of Native Americans **Credits: 3**

Cluster II: Natural Sciences and Environmental Stewardship

BIOL 103 - Life on Earth **Credits: 4**

BIOL 115 - Biotic Diversity of North America **Credits: 3**

BIOL 201 - Principles of Ecology and Evolution **Credits: 4**

BIOL 221 - Environmental Health and Protection **Credits: 4**

BIOL 272 - Conservation of Plant and Animal Resources **Credits: 3**
BIOL 362 - Ecology **Credits: 3**
BIOL 450 - Field Biology at Pymatuning Laboratory of Ecology **Credits: 4**
BIOL 490 - Field Studies in Biology **Credits: 1-4**
ENVE 301 - Environmental Aquatic Chemistry **Credits: 4**
GEOG 101 - Environment and Society **Credits: 3**
GEOG 341 - Climatology **Credits: 3**
GEOG 435 - Geography of Energy **Credits: 3**
GEOS 101 - The Dynamic Earth **Credits: 3**
GEOS 103 - Oceans and Atmospheres **Credits: 3**
GEOS 155 - Geology of Climate Change **Credits: 3**
GEOS 156 - Geology of Natural Disasters **Credits: 3**
GEOS 204 - Historical Geology **Credits: 4**
GEOS 310 - Environmental Geology **Credits: 4**
GEOS 370 - Oceanography **Credits: 4**
PHYS 101 - Energy and Our Environment **Credits: 3**
PSYC 331 - Environmental Psychology **Credits: 3**
SAFE 310 - Environmental Safety and Health Regulations and Sustainability **Credits: 3**

Cluster III: Environmental Policy, Economics, and Law

CRIM 374 - Environmental Crime and Justice **Credits: 3**
ECON 361 - Environmental Economics **Credits: 3**
ENVE 101 - Introduction to Environmental Engineering **Credits: 3**
FDNT 415 - Sustainable Nutrition **Credits: 3**
FDNT 470 - Human Food Consumption Patterns **Credits: 3**
RGPL 103 - Global Cities: Planning and Development **Credits: 3**
GEOG 104 - World Geography: Global Context **Credits: 3**
GEOG 231 - Economic Geography **Credits: 3**

GEOG 343 - Fresh Water Resources **Credits: 3**
or
RGPL 343 - Fresh Water Resources **Credits: 3**

GEOG 345 - Biogeography for Environmental Managers **Credits: 3**
or
RGPL 345 - Biogeography for Environmental Managers **Credits: 3**

GEOG 440 - Conservation: Environmental Analysis **Credits: 3**
or
RGPL 440 - Conservation: Environmental Analysis **Credits: 3**

MKTG 444 - Green Marketing **Credits: 3**
RGPL 426 - Environmental Land Use Planning **Credits: 3**

Category B

ANTH 110 - Contemporary Anthropology **Credits: 3**
ANTH 213 - World Archaeology **Credits: 3**
ANTH 240 - Introduction to Global Health **Credits: 3**
ANTH 314 - Contemporary Native American Cultures **Credits: 3**
ANTH 352 - The Anthropology of Human Rights **Credits: 3**
ANTH 444 - Medical Anthropology **Credits: 3**
ART 113 - Three-Dimensional Design **Credits: 3**
ART 213 - Woodworking: Function and Form **Credits: 3**
BIOL 301 - Fundamentals of Epidemiology **Credits: 3**

BIOL 323 - Introduction to Toxicology and Risk Assessment **Credits: 3**
BIOL 456 - Ecological Toxicology **Credits: 3**
ECON 338 - Poverty in Africa **Credits: 3**
ECON 339 - Economic Development I **Credits: 3**
GEOS 150 - Geology of National Parks **Credits: 3**
GEOS 152 - Physical Resources of the Earth **Credits: 3**
GEOS 201 - Foundations of Geology **Credits: 4**
GEOS 324 - Geology of Oil and Gas **Credits: 4**
JRNL 375 - World News Coverage **Credits: 3**
JRNL 466 - Community Journalism **Credits: 3**
NURS 101 - Disaster Awareness **Credits: 1**
NURS 143 - Healthy People—Promoting Wellness **Credits: 3**
PHIL 122 - Contemporary Moral Issues **Credits: 3**
PHIL 130 - Introduction to Biomedical Ethics **Credits: 3**
PLSC 250 - Public Policy **Credits: 3**
PLSC 389 - International Development Strategies **Credits: 3**
RLST 485 - Selected Topics in Feminist Studies of Religion **Credits: 3**
SOC 337 - Society, Globalization, and Risk **Credits: 3**
SOC 417 - Global Service Learning **Credits: 3**

Total Minor Requirements: 18

Certificate and Certification Programs

Living Learning/Global Scholarship Certificate

The goal of this certificate is to provide students with enhanced sociohumanistic analysis and communication skills. The certificate is completed in the first four semesters providing students an advantage in obtaining internships as part of their undergraduate experience as well as enhanced future employability. Among the proficiencies that the students will develop are:

- 1) demonstration of effective oral communication skills
- 2) analysis and evaluation of cultural data and scholarly sources
- 3) interpretation of sources to structure an effective argument
- 4) synthesis and evaluation of a series of arguments into comprehensive written and oral presentations
- 5) effective communication of socio-humanistic knowledge base to a diverse audience.

Hands-on co-curricular activities will reinforce students' proficiencies including opportunities for mentorship to grow and apply their skills in their chosen field of study.

Includes designated coursework that integrates core principles of analysis and communication over the first four semesters. Participation involves coursework and an on-campus residency requirement for 4 consecutive semesters. Most students can complete the certificate within the framework of their 120-credit degree requirements.

Core Curricular: 4

(1)

ANTH 211 - Cultural Anthropology **Credits: 3**
ENGL 202 - Composition II **Credits: 3**
HIST 198 - Explorations in Global History **Credits: 3**
JRNL 361 - Presentation Making **Credits: 3**

Co-Curricular Lab: 2

(2)

LLRN 100 - Cocurricular Activity Lab **Credits: 0.5**

LLRN 200 - Cocurricular Activity Lab **Credits: 0.5**

Total Certificate Requirements: 14

(1) Students will take core certificate courses as a cohort, one course each semester. Cohort sections of each course will be identified for students to register. Typical cohort sequence: Fall year one ANTH 211; Spring year one HIST 198; Fall year two JRNL 361; Spring year two ENGL 202 .

(2) Students will take LLRN 100 (0.5cr) once each semester in the first year and LLRN 200 (0.5cr) once each semester in the second year.

Living Learning/Scientific Communication Certificate

The goal of this certificate is to provide students with enhanced Scientific analysis and communication skills. The certificate is completed in the first four semesters providing students an advantage in obtaining internships and external research opportunities as part of their undergraduate experience as well as enhanced future employability. Among the proficiencies that the students will develop are:

- 1) demonstration of effective oral communication skills in a scientific setting
- 2) analysis and evaluation of scientific arguments for scientific validity
- 3) interpretation of scientific data to structure an effective argument
- 4) synthesis and evaluation of a series of arguments into a comprehensive written and oral presentation
- 5) effective communication of scientific knowledge-base to a general and diverse audience. Hands-on co-curricular activities will reinforce students' proficiencies including opportunities for mentorship to grow and apply their skills in their chosen field of study.

Enrolled students will participate in a living-learning community while earning their certificate as a cohort. Includes designated coursework that integrates core principles of scientific communication over the first four semesters. Participation involves coursework and an on-campus residency requirement for 4 consecutive semesters. Most students can complete the certificate within the framework of their 120-credit degree requirements.

Core Lab Science: 4

(1)

BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**

or

BIOL 201 - Principles of Ecology and Evolution **Credits: 4**

CHEM 111 - General Chemistry I **Credits: 4**

or

CHEM 113 - Advanced General Chemistry I **Credits: 4**

GEOS 201 - Foundations of Geology **Credits: 4**

Core Philosophy: 3

(1)

PHIL 101 - Critical Thinking **Credits: 3**

or

PHIL 221 - Symbolic Logic I **Credits: 3**

Core Math: 3

(1, 2)

MATH 217 - Probability and Statistics **Credits:** 3

Capstone Course: 3

(1)

ENGL 202 - Composition II **Credits:** 3

or

COMM 261 - Teamwork and Communication Skills for College and Career **Credits:** 3

Co-Curricular Lab: 2

(3)

LLRN 100 - Cocurricular Activity Lab **Credits:** 0.5

LLRN 200 - Cocurricular Activity Lab **Credits:** 0.5

Total Minor Requirements: 15

(1) Students will take core certificate courses as a Living-Learning cohort, one course each semester. Cohort sections of each course will be identified for students to register. Typical cohort sequence: Fall year one Core Lab Science; Spring year one Core Philosophy; Fall year two Core Math; Spring year two Capstone Course. The specific course in each course area will be specified one year before the start of each certificate program to coincide with freshmen recruitment.

(2) MATH 216 is interchangeable for MATH 217 .

(3) Students will take LLRN 100 (0.5cr) once each semester in the first year and LLRN 200 (0.5cr) once each semester in the second year.

Museum Studies Certificate

The certificate in Museum Studies introduces students to the broad range of work found in museum settings. It prepares students for museum work by directly engaging them in museum-based internships and through multi-disciplinary coursework in a wide variety of museum types and practices. The certificate also prepares students for graduate work in Museum Studies. Students will learn display and presentational practices, cataloging techniques, and the basics of artifact and artwork conservation.

Required Courses: 12

ANTH 318 - Museum Methods **Credits:** 3

ARHI 420 - Art Museums, Art Libraries, and Visual Resources **Credits:** 3

HIST 420 - Introduction to Public History **Credits:** 3

Museum-based Internship

ANTH 493 - Internship in Anthropology **Credits:** 3-12

or

ARHI 493 - Internship **Credits:** 3-12

or

HIST 493 - Internship **Credits:** 3-12

Choose one from the following: 3

ANTH 486 - Historic Artifacts **Credits:** 3

ANTH 489 - Prehistoric Technologies of Eastern North America **Credits:** 3

ARED 323 - Community-Based and Museum Art Education **Credits:** 3

HIST 421 - Archival Studies **Credits:** 3

HIST 422 - History Museums and Historic Sites: Theory and Practice **Credits:** 3

Total Certificate Requirements: 15

Popular Music Studies Certificate

The Certificate in Popular Music Studies introduces students to fundamental concepts associated with the creation and reception of popular music. It is a credential that enables students to demonstrate basic competency with the performance, production, or analysis of popular music, and may be particularly appealing to those studying music, communications media, entrepreneurship, or marketing.

The certificate program is administered jointly by the Department of Music and Department of Communications Media. It requires 10 credits of core courses and an additional 9 credits of electives. While basic performance or songwriting ability is recommended, no audition is required for admission to the program.

Core Courses: 10

COMM 249 - Basic Audio Recording Techniques **Credits: 3**

COMM 414 - Music, Media, and Culture **Credits: 3**

MUSC 114 - Analysis of Popular Music **Credits: 3**

MUSC 140 - Popular Music Ensemble **Credits: 1 (2)**

Electives: 9

9 credits from the following:

APMU____ Applied Music **Credits: 1-2 (1)**

COMM 354 - Media Law and Policy **Credits: 3**

COMM 449 - Advanced Audio Recording Techniques **Credits: 3**

MUHI 333 - History of Popular Music Since 1945 **Credits: 3**

MUSC 140 - Popular Music Ensemble **Credits: 1 (2)**

Total Certificate Requirements: 19

(1) Applied music instructors may require certificate participants to demonstrate basic proficiency with voice or a musical instrument. Students may elect up to two semesters of 1cr lessons.

(2) Students must register for MUSC 140 - Popular Music Ensemble (1cr) at least once. The course may be repeated up to three times for a total of four credits.

Popular Music Studies Certificate

(1)

The Certificate in Popular Music Studies introduces students to fundamental concepts associated with the creation and reception of popular music. It is a credential that enables students to demonstrate basic competency with the performance, production, or analysis of popular music, and may be particularly appealing to those studying music, communications media, entrepreneurship, or marketing.

The certificate program is administered jointly by the Department of Music and Department of Communications Media. It requires 10 credits of core courses and an additional nine credits of electives. While basic performance or songwriting ability is recommended, no audition is required for admission to the program.

Core Courses: 10

COMM 249 - Basic Audio Recording Techniques **Credits: 3**

COMM 414 - Music, Media, and Culture **Credits: 3**

MUSC 114 - Analysis of Popular Music **Credits:** 3
MUSC 140 - Popular Music Ensemble **Credits:** 1 (2)

Electives: 9

Nine credits from the following:

APMU XXX - Applied Music **Credits:** 1-2 (1)
COMM 354 - Media Law and Policy **Credits:** 3
COMM 449 - Advanced Audio Recording Techniques **Credits:** 3
MUHI 333 - History of Popular Music Since 1945 **Credits:** 3
MUSC 140 - Popular Music Ensemble **Credits:** 1 (2)

Total Certificate Requirements: 19

(1) Applied music instructors may require certificate participants to demonstrate basic proficiency with voice or a musical instrument. Students may elect up to two semesters of 1cr lessons.

(2) Students must register for MUSC 140 - Popular Music Ensemble (1cr) at least once. The course may be repeated up to three times for a total of four credits.

Shale, Gas, and Energy Certificate

The certificate includes traditional academic specialties of geographic information systems, geology, and safety sciences, which provides a broad understanding of the industry from the perspective of geological development, geospatial data analysis, and safety and environmental regulations and compliance.

Required Geoscience Courses: 6

GEOS 119 - Geology of Energy Resources **Credits:** 3 (1)
GEOS 409 - Geology of Shale Gas—Field Workshop **Credits:** 3

Required Geography Courses: 6

GEOG 109 - Geographic Information Science and Systems for Energy Applications **Credits:** 3 (1)
GEOG 409 - Spatial Analysis Applications in the Energy Sectors Workshop **Credits:** 3

Required Safety Science Courses: 6

SAFE 104 - Introduction to Safety in the Natural Gas Industry **Credits:** 3 (1)
SAFE 204 - Principles of Safety in the Natural Gas Industry **Credits:** 3

Total Certificate Requirements: 18

(1) With departmental permission, one 100-level introductory course may be substituted by an appropriate upper-division course.

Military Science

Information regarding the Department of Military Science can also be found in the Academic Affairs Division Areas section.

Minor

Military Leadership Minor

The Military Leadership minor prepares ROTC cadets to execute the duties of a commissioned officer in the United States Army. Includes 12 credits of applied military science focusing on military teamwork, leadership, management, and physical preparedness and 6 credits of foundational material including interpersonal self-awareness and the social construction of differences that are the basis for shared organizational objectives. Advances life-long learning and leader development utilizing the US Army Chief of Staff's Professional Reading List. The minor is only available for students enrolled in the Reserve Officer Training Corps (ROTC) and has been designed to connect the principles of teamwork and military leadership, allowing students to take both the minor in Military Leadership and the minor in Effective Teamwork and Communication.

Required Courses: 6

Foundational:

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits:** 3 (1)
THTR 161 - Introduction to Theatre: Interpersonal Practices **Credits:** 3 (2)

Military Science: 12 (3)

MLSC 305 - Fundamentals of Leadership and Modern Learning/Teaching Relationship **Credits:** 3
MLSC 306 - Study of Advance Leader Planning and Execution of Modern Combat Operations **Credits:** 3
MLSC 407 - Management of the Military Complex to Include Fundamentals of Military and International Law **Credits:** 3
MLSC 408 - Seminar in Military Analysis and Management **Credits:** 3

Practical Applications in Military Leadership: 0

Leadership Laboratory **Credits:** 0 (4)

Total Minor Requirements: 18

- (1) SOC 161 counts toward the Liberal Studies Social Science requirement. SOC 161 and SOC 151 are interchangeable for D/F repeat. SOC 161 is required for the Military Leadership minor.
- (2) THTR 161 counts toward the Liberal Studies Fine Arts requirement. THTR 161 and THTR 101 are interchangeable for D/F repeat. THTR 161 is required for the Military Leadership minor.
- (3) Students taking 300- and 400-level MLSC courses must be under contract with the Military Science Department to become a US Army officer.
- (4) The Leadership Laboratory, a 0cr course, provides the practical application of military leadership through scenario based tactics.

Other Degrees

Military Science Program

Required Courses:

MLSC 101 - Introduction to Military Science **Credits:** 2 (1)
MLSC 102 - Fundamentals of Military Science **Credits:** 2 (1)
MLSC 203 - Fundamentals of Tactical Operations, Techniques of Leadership, and Weapons Characteristics **Credits:** 2 (2)
MLSC 204 - National Security and Fundamentals of Military Topography **Credits:** 2 (2)
MLSC 305 - Fundamentals of Leadership and Modern Learning/Teaching Relationship **Credits:** 3
MLSC 306 - Study of Advance Leader Planning and Execution of Modern Combat Operations **Credits:** 3
MLSC 407 - Management of the Military Complex to Include Fundamentals of Military and International Law **Credits:** 3
MLSC 408 - Seminar in Military Analysis and Management **Credits:** 3

Total Program Requirements: 23

- (1) MLSC 101-MLSC 102 may substitute for the Liberal Studies requirement in Health and Wellness.
- (2) MLSC 203-MLSC 204 are available as free electives to all students without any military obligation.

University College

Michele A. Norwood, Director

Hillary Stitt, Assistant Director

Allison Baker, Student Success Specialist

Jeremy Risinger, Student Success Specialist

Website: www.iup.edu/university-college

Building on a strong culture of supporting student success, the University College enhances the level of support provided to students exploring their academic options. The University College provides support for all students who are unsure of the academic path to follow to meet their personal and career goals. With challenging courses grouped by interest areas, ranging from the arts to business to science, College Mentors and the University College staff help students navigate their way. In the University College, we don't just ask you to pick a major, we help you discover it.

Student support services provided include:

Advising. Each student in the University College has a first-year College Mentor.

Mentor. This is a professor who will work with the student to monitor their academic progress and assist them in navigating the many university offices and their services.

Help with selecting a major. Dedicated programming in the Major and Career Exploration Center helps students select a major that best fits their strengths and goals.

Team-taught linked courses. During the first year, students are enrolled in linked courses that are team taught by professors from different departments with a goal of building skills for academic success throughout their college career, while finding the pathway to a major.

Peer mentoring. Peer Mentors are fellow students who guide new students to resources and experiences across the university, helping them to make connections with each other.

Academic support. Students have access to academic support services such as tutoring, supplemental instruction, and skill-building workshops. Crimson Common Hour events bring students together to learn about campus resources and to meet others.

First-year experience. Our First-Year Experience for exploratory majors assists students in making a successful transition to college, helping them to build a strong foundation for future growth in their personal life and professional career.

Undergraduate Majors

The University College offers seven, subject-area-based, exploratory major options. Students select one, which will act as a starting point for finding the major that inspires them. Faculty College Mentors will help students identify their strengths and interests.

EXPL-STEM: Science, technology, engineering, or mathematics

EXPL-HSS: Humanities such as history and English or those related to social sciences such as political science and sociology

EXPL-ARTS: Arts such as art, art history, music, theatre, and dance

EXPL-EDU: Teaching, special education, and communications

EXPL-HHS: Safety science, sports sciences, fashion merchandising, interior design, hospitality management, family studies, and health fields such as nursing

EXPL-BU: Business such as management, marketing, finance, information technology, or accounting

EXPL: disciplines from across the entire university

First-Year Courses and Experiences

Students take part in classes, workshops, and group activities that support them as a new college student. As they meet with an advisor at New Student Orientation, students are encouraged to consider:

- What are some areas you might like to explore, including any major related coursework?
- What are the areas you do *not* want to consider?

During the first academic year, students take linked classes that are team taught by their College Mentor. The classes are designed to coordinate in a way that students can strengthen their skills while navigating the path to selecting the major that best fits their academic profile and professional goals.

All University College Students complete a *Pathways* course in the fall semester that is specific to their exploratory major. This seminar course, linked with a Learning Strategies course, are designed as an introduction to the disciplines in this area and support for study at the college level. Students completing the course demonstrate a broad understanding of disciplines associated with their intended college, display fluency with the general vocabulary and terminology relevant to those disciplines, engage in scholarly experiences both within the intended college and across the university, and engage in practical experiences in a self-identified discipline associated with their intended college. Starting on the right track can make the entire college experience more successful.

Crimson Common Hours are designed to expand a student's university experience. Students are invited to attend Common Hours as part of their *Pathways* course. These one-hour, themed workshops provide students with direction on getting involved academically and socially on campus, explore opportunities for on-campus employment, and promote strong study skills to ensure success.

Many of the courses completed by students in the University College during their first year are Liberal Studies courses that all students complete. The *Pathways* and Learning Strategies courses count toward the total credits needed to graduate. What students learn in these classes can save time toward graduation. Learning how to navigate higher education and how to tackle college assignments can help a student avoid repeating a course.

Eberly College of Business and Information Technology

Geoffrey Mills, Interim Dean

Cynthia L. Strittmatter, Associate Dean

Prashanth N. Bharadwaj, Dean's Associate

Terry Appolonia, Assistant Dean

Tracy Vanhorn-Juart, Director, Student Retention and Success

Website: www.iup.edu/business

In the spring of 1994, the College of Business was renamed to commemorate the generous commitment of the Eberly family through the Eberly Family Trust to the developmental needs of the college. Departments within the Eberly College of Business and Information Technology (ECOBIT) include Accounting, Finance and Legal Studies, Management, Information Systems and Decision Sciences, and Marketing.

College Majors

Accounting

Finance

Human Resource Management

International Business

Management

(Tracks: General Management, Entrepreneurship and Small Business Management, and Supply Chain Management)

Management Information Systems

(Tracks: Information Systems, Information Technology)

Marketing

Interdisciplinary Programs, Minors and Certificates

The interdisciplinary degree programs, minors, and certificates are multidisciplinary and are not specific to one university college. Visit [Interdisciplinary Programs](#) to view offerings and requirements.

Mission Statement

The mission of the Eberly College is to provide students with a broad range of high-value undergraduate and graduate business programs aimed at fostering ethical behavior and entrepreneurial spirit and developing skills vital to their success in today's world.

The college enrolls a highly diverse student body from Pennsylvania, other states, and from many countries around the world. The college provides a student-centered and technologically integrated learning environment. The college maintains a global focus and provides opportunities for real-world exposure and cross-cultural experience.

The Eberly College is especially committed to high-quality instruction. It is committed to research activities which enhance the quality of instruction and contribute to both the applied and basic literature of business.

Committed to the economic vitality of the region, the Eberly College engages in service activities that include opportunities for involvement of both faculty and students with the business community.

Vision Statement

The Eberly College of Business and Information Technology aspires to be a premier business school, recognized worldwide for excellence through applied learning, leadership development, cross-cultural enrichment, scholarship, and service.

Accreditation

AACSB International—the Association to Advance Collegiate Schools of Business—has accredited the undergraduate and graduate business degree programs offered by the ECOBIT. Accreditation shows that a school fulfills its mission, meets its objectives, and maintains the high standards set by AACSB International. The outcome is managers and business professionals who know how to think, communicate, solve problems, and provide leadership in the global marketplace.

Bachelor of Science Degree

For those pursuing the bachelor of science degree, IUP's training will provide a broad liberal background in the behavioral sciences; a keen perception of the socioeconomic world in which we live and work; a foundation of general professional education for personally fruitful and socially useful careers in the varied fields of business; and an opportunity to obtain the specialized knowledge and skills essential to future occupational growth and advancement. There are seven bachelor of science degree programs offered in business—Accounting, Finance, Human Resource Management, International Business, Management (General Management, Entrepreneurship and Small Business Management, and Supply Chain Management), Management Information Systems (Information Systems, Information Technology), and Marketing. Each program includes a variety of business and business-related courses designed to enrich the student's understanding of the modern business system.

A student may not pursue course work in the ECOBIT with the expectation of graduating from the college unless he/she has been accepted as a degree candidate in the college.

Enrollment in all ECOBIT courses at the 300 and 400 level is restricted to students with junior or senior standing. All students, regardless of major or program affiliation, must meet course prerequisite requirements to enroll in a given course.

Students may, in consultation with their advisors, plan their program of study to obtain a minor in an area of business specialization other than their major or a related area outside the ECOBIT.

Students can also pursue a Bachelor of Science degree in all the ECOBIT's majors and concentrations by completing the first 75 credits of the IUP BS program at the campus of PES University in Bangalore, India. Upon successful completion of these 75 credits, students can transfer these 75 PES credits to IUP and complete the remaining 45 credits at IUP and receive a BS degree in one of the majors offered by the ECOBIT at IUP. Contact the ECOBIT for further details.

ECOBIT Honors Program Track

The Eberly College of Business and Information Technology Honors Program is a highly selective academic track of 36 credits that provides accelerated and unique learning experiences. The program emphasizes integrated curricula, leadership development and student/faculty collaboration that intellectually advances students who possess the capacity and motivation to excel. A Business Honors application process is holistic in nature and considers SAT scores, secondary school GPA and business coursework, a letter of recommendation, a listing of leadership and service activities and a writing sample describing academic and career goals. Selection is made by an Honors Selection Committee comprised of students, faculty members and administrators. Each admitted student receives a merit-based academic scholarship commensurate with his or her application credentials. To remain in the program, a student must maintain a minimum 3.25 cumulative GPA, participation in prescribed campus leadership and engagement activities and abide by the Eberly Business Honors code of conduct.

Honors coursework is recorded on university transcripts and students completing the Business Honors Program are recognized at college commencement ceremonies.

ECOBIT Academic Policies

Academic Integrity Pledge

ECOBIT continually strives to strengthen the integrity and ethical conduct of both students and faculty. Students studying in the ECOBIT are required to sign a student pledge of academic honesty. The purpose of the student pledge is to build trust among students and faculty while fostering an academic environment of shared values.

Junior Standing

To be accepted for junior standing, a business major must have:

- accumulated 60 credits or more of academic credit;
- achieved a minimum 2.0 cumulative GPA; and
- successfully completed the following courses: ACCT 201, ACCT 202, BLAW 235, COSC 101/IFMG 101 or IFMG 110, ECON 121, ECON 122, ENGL 101, ENGL 202, MATH 107/MATH 108, MATH 214, PSYC 101, and QBUS 215.

Business majors are required to have achieved junior standing before enrolling in 300- or 400-level courses in the ECOBIT. Students who have not completed the junior standing requirements may, with permission from the dean or dean's designee, enroll in 300- or 400-level courses in ECOBIT; however, they may be expected to schedule courses during the winter and/or summer sessions to meet the requirements in a timely manner.

Note to Business Majors: All business core classes must be successfully completed before MGMT 495 - Business Policy can be taken. These classes include ACCT 201, ACCT 202, BCOM 321, BLAW 235, COSC 101/IFMG 101 or IFMG 110, FIN 310, IFMG 300, MGMT 310, MGMT 330, MKTG 320, and QBUS 215.

Residency Requirement

All of the college's majors must take a minimum of 50 percent of their required business* credits in IUP course work. IUP credits earned by examination, such as CLEP, are counted toward IUP residency.

Restriction for Nonbusiness Majors

Students not majoring in business may count a maximum of 30 credits in business* coursework toward the 120-credit-degree minimum. Business credits in excess of 30 will be permitted only as credits beyond the 120 for graduation.

*For purposes of all policies above, "business" coursework consists of all ECOBIT courses except IFMG 101 and QBUS 215. ECON 334 is also treated as a "business" course. "Nonbusiness" coursework consists of IFMG 101, QBUS 215, and all non-ECOBIT courses except ECON 334.

The Corporate Relations and Internship Office

IUP offers one of the largest business internships programs in Pennsylvania. Students can choose from a wide range of organizations to gain real-world experience while earning academic credit. Internship advisors are available to counsel students regarding internship prerequisites, procurement of the internship position, and scheduling. The Eberly College of Business and IT partners with the IUP Career and Professional Development Center for Career Fairs, networking programs, and professional development programming.

Center for Leadership and Academic Student Success (CLASS)

CLASS provides leadership opportunities designed to enhance and strengthen the undergraduate student experience. Included among them are the Eberly Business Honors Program, the College of Business Student Advisory Council, the Business Living-Learning Community, and the GPS Mentoring Project. CLASS staff members also provide a full range of academic support services including academic recovery, course drop/add/withdrawal, course substitutions, scholarships, tutoring, and support referrals.

School of International Management

With the increasing demand for cross-cultural knowledge and international competence, the ECOBIT has committed itself to a comprehensive strategy of providing future business leaders with a global foundation so they may become the world-class managers of tomorrow. The School of International Management offers a rich program that will strengthen business students and provide regional businesses with personnel who have a global perspective and internationally competitive management skills. This global perspective is provided to students through broad exposure to cross-cultural course work, integration of international concepts in selected business courses, direct exposure to individuals from other cultures, and a period of residency in another country.

Business Advisory Council

Eberly College's Business Advisory Council is a select group of more than 80 business leaders. The council helps the college in its educational and service mission through counsel and feedback on matters such as program objectives, curriculum development, program development and promotion, and recruitment of students, retention, and placement of students.

College of Business Student Advisory Council (COBSAC)

Unique at IUP, COBSAC facilitates communication and collaboration among the 11 departmental student organizations and honorary societies within Eberly College. COBSAC also serves as a representative body for Eberly College students and an organizing body for college-wide activities and events.

COBSAC Member Organizations

American Marketing Association
Association for Operations Management
Association of Management Information Systems
International Business Association
Management Association
National Association of Black Accountants
Phi Gamma Nu

Society for Human Resource Management
Student Accounting Association
Student Finance Association
Student Managed Investment Portfolio

Service Units

The **Management Services Group** (MSG) is a confederation of consulting units instituted in 1991 by the ECOBIT in support of ongoing and start-up businesses in the Indiana County region. An integral objective of the group is to provide educational opportunities through an ongoing schedule of seminars and workshops for local businesses. The MSG consulting units are listed below.

The **Small Business Development Center** offers free business consulting to existing and start-up businesses in the preparation of business plans. The staff helps pull together a business plan suitable for presentation to a bank. This includes working with the client to put together a complete set of financial projections.

The **Small Business Institute** (SBI) was established to assist existing small businesses with various types of problem resolution. Through the SBI, undergraduate and graduate business students work under close supervision of faculty members to assist clients with accounting systems, market studies, computer system installation, business planning, and operations management.

The **Government Contracting Assistance Program** helps area businesses identify and respond to federal and state requests for bids for products and services. The program is funded by the Department of Defense. Contract sales generated through this program add to the vitality of the local economy.

The **Center for Family Business** was designed to serve the unique needs of family-owned businesses. Issues such as performance compensation, establishment of an effective corporate board, conflict resolution, management of siblings and cousin teams, succession, and estate planning are critically important and virtually ignored by other educational forums. The center provides an educational program consisting of four meetings per year that focus on the topics outlined.

The **IUP ExcEL Center** (Excellence in Entrepreneurial Leadership) was established to enhance the culture of entrepreneurship, innovation, and new venture creation through IUP and the local community. The center provides students across all academic disciplines with opportunities to pursue an entrepreneurial path while continuing their education. The center allows IUP students to have a full range of entrepreneurial experiences through delivery of undergraduate and graduate entrepreneurship course work, student involvement in entrepreneurial activities, and entrepreneurial community outreach programs.

Pre-law Interdisciplinary Minor

Successful lawyers possess excellent skills in writing and speaking and can analyze a problem and explain its solution in clear, logical terms. The Pre-law interdisciplinary minor prepares the student especially well in these areas and provides the skills and knowledge needed to do well in the law school admissions examination. This minor may be taken with any major in the ECOBIT. Although a pre-law minor is not required for law school admission, this interdisciplinary minor will provide students with the prerequisite skills for law school. Interested students should contact the Department of Finance and Legal Studies.

Minor in Business Administration for Nonbusiness Majors

The ECOBIT offers, as a joint effort of its departments, a 21 credit Business Administration (for Nonbusiness Majors) Minor. The program is designed to give nonbusiness majors a general background in business with 12 credits of prescribed Liberal Studies courses and 21 credits of required business courses.

Accounting

Website: www.iup.edu/accounting
Sekhar Anantharaman, Chair

Accounting majors receive instruction in financial reporting system design and analysis, managerial accounting, taxation, and nonprofit accounting leading to career opportunities in public, industry, and government accounting.

Bachelor of Science

Accounting, BS

Liberal Studies: 47-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 107 - Business Mathematics **Credits: 3**

MATH 108 - Applications of Business Mathematics **Credits: 1**

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

ECON 121 - Principles of Macroeconomics **Credits: 3**

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 6

ECON 122 - Principles of Microeconomics **Credits: 3**

MATH 214 - Probability and Statistics for Business Majors **Credits: 3 (1)**

College: Business Administration Core: 36

Required Courses:

ACCT 201 - Accounting Principles I **Credits: 3**

ACCT 202 - Accounting Principles II **Credits: 3**

BCOM 321 - Business and Interpersonal Communications **Credits: 3**

BLAW 235 - Legal Environment of Business **Credits: 3**

COSC 101 - Computer Literacy **Credits: 3**

or

IFMG 101 - Computer Literacy **Credits: 3**

or

IFMG 110 - Business Spreadsheet Computing **Credits: 3 (2)**

FIN 310 - Fundamentals of Finance **Credits: 3**

IFMG 300 - Information Systems: Theory and Practice **Credits: 3**

MGMT 310 - Principles of Management **Credits: 3**

MGMT 330 - Production and Operations Management **Credits: 3**

MGMT 495 - Business Policy **Credits: 3**

MKTG 320 - Principles of Marketing **Credits: 3**

QBUS 215 - Business Statistics **Credits: 3**

Major: Accounting: 24

(3)

Required Courses:

ACCT 304 - Intermediate Accounting I **Credits: 3**
ACCT 305 - Intermediate Accounting II **Credits: 3**
ACCT 311 - Cost Accounting **Credits: 3**
ACCT 401 - Advanced Accounting **Credits: 3**
ACCT 421 - Federal Tax I **Credits: 3**
ACCT 431 - Auditing **Credits: 3**

Controlled Electives: 6

Any two courses from the following:

ACCT 412 - Advanced Cost Accounting **Credits: 3**
ACCT 422 - Federal Tax II **Credits: 3**
ACCT 432 - Forensic and Internal Auditing **Credits: 3**
ACCT 441 - Accounting for Government and Nonprofit Organizations **Credits: 3**
ACCT 461 - Accounting Systems **Credits: 3**

Free Electives: 12-13

(4,5)

Total Degree Requirements: 120

(1) MATH 214 or MATH 216 or MATH 217.

(2) IFMG 110 cannot be used as a D/F repeat for COSC 101/IFMG 101.

(3) Students must meet the grade prerequisite(s) listed in the course description section of this catalog before advancing to the next course.

(4) Students interested in pursuing the following career paths should consider:

— **Certified Public Accountant (CPA):** ACCT 422, ACCT 441, ACCT 493, and BLAW 336. Students seeking certification as a CPA will be required to satisfy the educational requirement of 150cr.

— **Certified Management Accountant (CMA):** ACCT 412, ACCT 432, ACCT 461, ACCT 493

— **Certified Fraud Examiner (CFE):** ACCT 432, ACCT 493, CRIM 101, ECON 223.

(5) Students may be able to apply these credits in conjunction with the controlled electives to earn a minor in another discipline, such as finance, marketing, economics, and pre-law. Students should follow the advice of their faculty advisor to fulfill the above requirements.

Minor

Accounting Minor

(1)

(for business majors and students majoring in computer science, criminology, economics, employment and labor relations, fashion merchandising, hospitality management, and sport administration)

Prescribed Liberal Studies:

Mathematics:

MATH 214 - Probability and Statistics for Business Majors **Credits: 3**

or

MATH 217 - Probability and Statistics **Credits: 3**

Social Science:

ECON 121 - Principles of Macroeconomics **Credits: 3**

Liberal Studies Elective:

COSC 101 - Computer Literacy **Credits: 3**

or

IFMG 101 - Computer Literacy **Credits: 3**

Courses: 12

ACCT 201 - Accounting Principles I **Credits: 3**

ACCT 202 - Accounting Principles II **Credits: 3**

ACCT 304 - Intermediate Accounting I **Credits: 3**

ACCT 305 - Intermediate Accounting II **Credits: 3**

Two courses from the following: 6

ACCT 311 - Cost Accounting **Credits: 3**

ACCT 401 - Advanced Accounting **Credits: 3**

ACCT 421 - Federal Tax I **Credits: 3**

or

ACCT 422 - Federal Tax II **Credits: 3**

ACCT 431 - Auditing **Credits: 3**

or

ACCT 432 - Forensic and Internal Auditing **Credits: 3**

Total Minor Requirements: 18

(1) Minor course requirements must be completed with a minimum cumulative GPA of 2.0.

Finance and Legal Studies

Website: www.iup.edu/financelegal

Ibrahim Affaneh, Chair

The Finance program, leading to a degree of bachelor of science, is designed to educate students who are interested in pursuing one of the many career opportunities within the areas of corporate and personal financial management, banking, insurance, other financial institutions, and investments.

The objective of the Finance program is to provide students with a broad base of knowledge, both theoretical and practical, as well as the analytical and technical skills necessary to build a successful career in an exciting and rapidly changing field.

Corporate Finance Track

The corporate finance track provides a foundation in financial concepts, analytics, and decision-making skills essential for success in a wide variety of careers in financial management, banking, insurance, other financial institutions, and investments.

Financial Planning Track

The financial planning track addresses a full range of topics within financial planning, including wealth management, estate planning, and retirement planning. The financial planning track will help prepare students seeking careers in financial planning by emphasizing the topics necessary for obtaining the Certified Financial Planner designation.

Legal Studies

Legal Studies offers law and law-related courses with special emphasis on business applications. Legal Studies provides the student with a broad legal and ethical foundations necessary to a career in business or as preparation for pursuit of a law or law-related career.

Pre-law Interdisciplinary Minor

This minor may be taken with any major in the ECOBIT. Please refer to the Academic Affairs section for a complete list of requirements.

Bachelor of Science

Corporate Finance Track, Finance, BS

The Finance program, leading to a degree of bachelor of science, is designed to educate students who are interested in pursuing one of the many career opportunities within the areas of corporate and personal financial management, banking, insurance, other financial institutions, and investments.

The objective of the Finance program is to provide students with a broad base of knowledge, both theoretical and practical, as well as the analytical and technical skills necessary to build a successful career in an exciting and rapidly changing field.

Liberal Studies: 47-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 107 - Business Mathematics **Credits: 3**

MATH 108 - Applications of Business Mathematics **Credits: 1**

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

ECON 121 - Principles of Macroeconomics **Credits: 3**

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 6

ECON 122 - Principles of Microeconomics **Credits: 3**

MATH 214 - Probability and Statistics for Business Majors **Credits: 3 (1)**

College: Business Administration Core: 36

Required Courses:

ACCT 201 - Accounting Principles I **Credits: 3**

ACCT 202 - Accounting Principles II **Credits: 3**

BCOM 321 - Business and Interpersonal Communications **Credits: 3**

BLAW 235 - Legal Environment of Business **Credits: 3**

COSC 101 - Computer Literacy **Credits: 3**

or

IFMG 101 - Computer Literacy **Credits: 3**

or

IFMG 110 - Business Spreadsheet Computing **Credits: 3 (2)**

FIN 310 - Fundamentals of Finance **Credits: 3**

IFMG 300 - Information Systems: Theory and Practice **Credits: 3**

MGMT 310 - Principles of Management **Credits: 3**

MGMT 330 - Production and Operations Management **Credits: 3**

MGMT 495 - Business Policy **Credits: 3**

MKTG 320 - Principles of Marketing **Credits: 3**

QBUS 215 - Business Statistics **Credits: 3**

Major: Corporate Finance Track: 24

Required Courses:

FIN 315 - Financial Analysis Using Electronic Spreadsheets **Credits: 3**

FIN 320 - Corporate Finance **Credits: 3**

FIN 324 - Principles of Investments **Credits: 3**

FIN 360 - Insurance and Risk Management **Credits: 3**

FIN 410 - Financial Institutions and Markets **Credits: 3**

FIN 422 - Seminar in Finance **Credits: 3**

FIN 425 - Financial Derivatives **Credits: 3**

Controlled Electives: 3

One course from the following:

ACCT 305 - Intermediate Accounting II **Credits: 3**

ACCT 421 - Federal Tax I **Credits: 3**

BLAW 336 - Law of Business Organizations **Credits: 3**

ECON 325 - Monetary Economics I **Credits: 3**

ECON 334 - Managerial Economics **Credits: 3**

ECON 345 - International Trade **Credits: 3**

ECON 356 - Introduction to Econometrics **Credits: 3 and**

FIN 300 - Personal Finance **Credits: 3**

FIN 365 - Student Managed Investment Portfolio I—Valuation **Credits: 1.5 and**

FIN 366 - Student Managed Investment Portfolio II—Performance **Credits: 1.5 (3)**

FIN 420 - Investment Analysis **Credits: 3**

FIN 424 - International Financial Management **Credits: 3**

FIN 481 - Special Topics **Credits: 3**

FIN 493 - Finance Internship **Credits:** 3-12
REAL 382 - Real Estate Fundamentals **Credits:** 3

Free Electives: 12-13

Total Degree Requirements: 120

- (1) MATH 214 or MATH 216 or MATH 217.
- (2) IFMG 110 cannot be used as a D/F repeat for COSC 101/IFMG 101.
- (3) In order for FIN 365 and FIN 366 to count as a controlled elective, you must complete both FIN 365 (1.5cr) and FIN 366 (1.5cr).

Financial Planning Track, Finance, BS

Liberal Studies: 47-48

As outlined in Liberal Studies Requirements section with the following specifications:

Mathematics:

MATH 107 - Business Mathematics **Credits:** 3
and
MATH 108 - Applications of Business Mathematics **Credits:** 1

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

ECON 121 - Principles of Macroeconomics **Credits:** 3
PSYC 101 - General Psychology **Credits:** 3

Liberal Studies Electives: 6

ECON 122 - Principles of Microeconomics **Credits:** 3
MATH 214 - Probability and Statistics for Business Majors **Credits:** 3
(1)

College: Business Administration Core: 36

ACCT 201 - Accounting Principles I **Credits:** 3
ACCT 202 - Accounting Principles II **Credits:** 3
BCOM 321 - Business and Interpersonal Communications **Credits:** 3
BLAW 235 - Legal Environment of Business **Credits:** 3
COSC 101 - Computer Literacy **Credits:** 3
or
IFMG 101 - Computer Literacy **Credits:** 3

or

IFMG 110 - Business Spreadsheet Computing **Credits: 3**

(2)

FIN 310 - Fundamentals of Finance **Credits: 3**

IFMG 300 - Information Systems: Theory and Practice **Credits: 3**

MGMT 310 - Principles of Management **Credits: 3**

MGMT 330 - Production and Operations Management **Credits: 3**

MGMT 495 - Business Policy **Credits: 3**

MKTG 320 - Principles of Marketing **Credits: 3**

QBUS 215 - Business Statistics **Credits: 3**

Major: Financial Planning Track: 24

ACCT 421 - Federal Tax I **Credits: 3**

FIN 300 - Personal Finance **Credits: 3**

FIN 315 - Financial Analysis Using Electronic Spreadsheets **Credits: 3**

FIN 323 - Retirement Planning **Credits: 3**

FIN 324 - Principles of Investments **Credits: 3**

FIN 360 - Insurance and Risk Management **Credits: 3**

FIN 400 - Estate Planning **Credits: 3**

FIN 426 - Seminar in Financial Planning **Credits: 3**

Free Electives: 12-13

Total Degree Requirements: 120

(1) MATH 214 or MATH 216 or MATH 217.

(2) IFMG 110 cannot be used as a D/F repeat for COSC 101/IFMG 101.

Minor

Finance Minor

(1,2)

(for business majors in the ECOBIT only)

Required Courses: 9

FIN 310 - Fundamentals of Finance **Credits: 3**

FIN 320 - Corporate Finance **Credits: 3**

FIN 324 - Principles of Investments **Credits: 3**

Controlled Electives: 9

Three courses from FIN or REAL at 300 level or higher

Total Minor Requirements: 18

(1) Minor course requirements must be completed with a minimum cumulative GPA of 2.0.

(2) Maximum of two REAL courses.

Information Systems and Decision Sciences

Website: www.iup.edu/isds

Dr. Pankaj Chaudhary, Chair

Management information systems prepares students for careers in computer-based information systems in organizational environments. Newer areas such as networking, cybersecurity, and user/manager involvement in the global business environment are integrated with the traditional skills of programming, analysis and design, database development, various architectures, and application development. Microprocessor technology, the mainframe environment, and client server applications are included, as well as an emphasis on business computing issues such as profitability, budgeting, collaboration, and project management. These adhere to standards for a balanced curriculum as promulgated by the Association for Information Systems (AIS), the technology-accrediting arm of the Association to Advance Collegiate Schools of Business (AACSB). AIS now comprises organizations such as AITP, SIMS, TIMS, ORSA, and ICIS.

Decision sciences provides students with a knowledge of statistical and quantitative methods used to enhance the business decision process. The methodologies include linear programming, forecasting, simulation, stochastic process, queuing, and network models.

The department creates a learning process that instills in its graduates respect, integrity, excellence, and a commitment to lifelong learning. Internship experiences facilitate the student's entry into full-time employment in a rapidly changing technological environment.

Bachelor of Science

Information Systems Track, Management Information Systems, BS

The Information Systems Track prepares students for careers in computer-based information systems in organizational environments. Integrates areas such as networking, cybersecurity, and user/manager involvement in the global business environment with the traditional skills of programming, analysis and design, database development, architecture designs, and application development. Project management, Internet of Things (IoT), and client server applications are included, as well as an emphasis on business computing issues such as profitability, budgeting, collaboration, and front end/back end system processing.

Liberal Studies: 47-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 107 - Business Mathematics **Credits:** 3

MATH 108 - Applications of Business Mathematics **Credits:** 1

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

ECON 121 - Principles of Macroeconomics **Credits:** 3

PSYC 101 - General Psychology **Credits:** 3

Liberal Studies Electives: 6

ECON 122 - Principles of Microeconomics **Credits: 3**
MATH 214 - Probability and Statistics for Business Majors **Credits: 3 (1)**
No courses with IFMG prefix

College: Business Administration Core: 36

Required Courses:

ACCT 201 - Accounting Principles I **Credits: 3**
ACCT 202 - Accounting Principles II **Credits: 3**
BCOM 321 - Business and Interpersonal Communications **Credits: 3**
BLAW 235 - Legal Environment of Business **Credits: 3**
COSC 101 - Computer Literacy **Credits: 3**
or
IFMG 101 - Computer Literacy **Credits: 3**
or
IFMG 110 - Business Spreadsheet Computing **Credits: 3 (2)**
FIN 310 - Fundamentals of Finance **Credits: 3**
IFMG 300 - Information Systems: Theory and Practice **Credits: 3**
MGMT 310 - Principles of Management **Credits: 3**
MGMT 330 - Production and Operations Management **Credits: 3**
MGMT 495 - Business Policy **Credits: 3**
MKTG 320 - Principles of Marketing **Credits: 3**
QBUS 215 - Business Statistics **Credits: 3**

Major: Information Systems Track: 21

Required Courses:

IFMG 210 - Introduction to Front-End Business Applications **Credits: 3**
IFMG 230 - Introduction to Back-End Business Applications **Credits: 3**
IFMG 250 - Business Systems Technology **Credits: 3**
IFMG 352 - LAN Design and Installation **Credits: 3**
IFMG 390 - Database Theory and Practice **Credits: 3**
IFMG 460 - Analysis and Logical Design **Credits: 3**
IFMG 475 - Project Management and Implementation **Credits: 3**

Controlled Electives: 3

(3)

One course from the following:

CRIM 321 - Cybersecurity and Loss Prevention **Credits: 3**
or
CRIM 323 - Cybersecurity and the Law **Credits: 3**
or
any course with prefix COSC or IFMG numbered 300 and above (except IFMG 300)
or
QBUS 300 and above

Free Electives: 12-13

Total Degree Requirements: 120

- (1) MATH 214 or MATH 216 or MATH 217.
- (2) IFMG 110 cannot be used as a D/F repeat for COSC 101/IFMG 101.
- (3) A student may choose to fulfill the requirements through an internship.

Information Technology Track, Management Information Systems, BS

The Information Technology (IT) Track of the management information systems (MIS) program provides graduates with the skills and knowledge to take on appropriate professional positions in the IT field upon graduation. It aims also at providing skills for graduates to grow into leadership positions and/or pursue research or graduate studies in the field. The IT field is a vibrant field that emerged as a result of the rapid advances in the technology field and the need for organizations to adjust quickly to these advances. IT Track graduates should be the first to take the lead to fill the computing needs of organizations. The IT Track encompasses courses in the latest technological advances, thus enabling graduating students to take the lead in this vibrant field.

Liberal Studies: 47-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

- MATH 107 - Business Mathematics **Credits: 3**
- MATH 108 - Applications of Business Mathematics **Credits: 1**

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

- ECON 121 - Principles of Macroeconomics **Credits: 3**
- PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 6

- ECON 122 - Principles of Microeconomics **Credits: 3**
- MATH 214 - Probability and Statistics for Business Majors **Credits: 3 (1)**

College: Business Administration Core: 36

Required Courses:

- ACCT 201 - Accounting Principles I **Credits: 3**
 - ACCT 202 - Accounting Principles II **Credits: 3**
 - BCOM 321 - Business and Interpersonal Communications **Credits: 3**
 - BLAW 235 - Legal Environment of Business **Credits: 3**
 - COSC 101 - Computer Literacy **Credits: 3**
- or

IFMG 101 - Computer Literacy **Credits: 3**
or
IFMG 110 - Business Spreadsheet Computing **Credits: 3 (2)**
FIN 310 - Fundamentals of Finance **Credits: 3**
IFMG 300 - Information Systems: Theory and Practice **Credits: 3**
MGMT 310 - Principles of Management **Credits: 3**
MGMT 330 - Production and Operations Management **Credits: 3**
MGMT 495 - Business Policy **Credits: 3**
MKTG 320 - Principles of Marketing **Credits: 3**
QBUS 215 - Business Statistics **Credits: 3**

Major: Information Technology Track: 21

Required Courses:

IFMG 210 - Introduction to Front-End Business Applications **Credits: 3**
or
IFMG 230 - Introduction to Back-End Business Applications **Credits: 3**

IFMG 250 - Business Systems Technology **Credits: 3**
IFMG 254 - Computer Technology Virtualization **Credits: 3**
IFMG 352 - LAN Design and Installation **Credits: 3**
IFMG 360 - Information Storage and Management **Credits: 3**
IFMG 390 - Database Theory and Practice **Credits: 3**
IFMG 471 - Data Center and Cloud Computing **Credits: 3**

Controlled Electives: 3

(3) One courses from the following:

CRIM 321 - Cybersecurity and Loss Prevention **Credits: 3**
or
CRIM 323 - Cybersecurity and the Law **Credits: 3**
or
any course with prefix COSC or IFMG numbered 300 or above (except IFMG 300)
or
QBUS 300 or above

Free Electives: 12-13

Total Degree Requirements: 120

- (1) MATH 214 or MATH 216 or MATH 217.
- (2) IFMG 110 cannot be used as a D/F repeat for COSC 101/IFMG 101.
- (3) A student may choose to fulfill the requirements through an internship.

Management Information Systems, Information Systems Track, BS

Management Information Systems, Information Technology Track, BS

Minor

Management Information Systems Minor

(1)

The department welcomes minors for students who are majoring in other business programs. The Management Information Systems minor offers other business majors a technical enhancement to their area of interest, a necessity for today's business manager.

(for business majors in the ECOBIT only)

Required Courses:

IFMG 210 - Introduction to Front-End Business Applications **Credits: 3**

IFMG 230 - Introduction to Back-End Business Applications **Credits: 3**

IFMG 300 - Information Systems: Theory and Practice **Credits: 3 (2)**

IFMG 390 - Database Theory and Practice **Credits: 3**

Controlled Electives: 6

Six credits from any IFMG and/or QBUS courses except

IFMG 101 - Computer Literacy **Credits: 3**

IFMG 201

QBUS 215 - Business Statistics **Credits: 3**

Total Minor Requirements: 18

(1) Minor course requirements must be completed with a minimum cumulative GPA of 2.0.

(2) IFMG 300 is both a core course and requirement for the minor.

Management

Website: www.iup.edu/management

Ramesh G. Soni, Chair

Graduates holding the bachelor of science degree with a major in management may find employment opportunities in both the public and private sectors. Opportunities are expected to be especially plentiful in the services sector (e.g., retailing, health care, information technology, finance, and transportation), where these degrees will be valuable.

The department offers three separate degree programs: Management, Human Resource Management, and International Business. The bachelor of science degree with a major in management offers three tracks in which students can concentrate: General Management, Supply Chain Management, and Entrepreneurship and Small Business Management.

Bachelor of Science

Entrepreneurship and Small Business Management Track, Management, BS

Students taking this track will focus on creation and operation of a small business. This track is also for graduates who will be working in small businesses where the manager often must perform several managerial roles and manage several functions.

Liberal Studies: 47-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 107 - Business Mathematics **Credits:** 3
MATH 108 - Applications of Business Mathematics **Credits:** 1

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

ECON 121 - Principles of Macroeconomics **Credits:** 3
PSYC 101 - General Psychology **Credits:** 3
a Global and Multicultural Awareness course (recommended)

Liberal Studies Electives: 6

ECON 122 - Principles of Microeconomics **Credits:** 3
MATH 214 - Probability and Statistics for Business Majors **Credits:** 3 (1)

College: Business Administration Core: 36

Required Courses:

ACCT 201 - Accounting Principles I **Credits:** 3
ACCT 202 - Accounting Principles II **Credits:** 3
BCOM 321 - Business and Interpersonal Communications **Credits:** 3
BLAW 235 - Legal Environment of Business **Credits:** 3
COSC 101 - Computer Literacy **Credits:** 3
or
IFMG 101 - Computer Literacy **Credits:** 3
or
IFMG 110 - Business Spreadsheet Computing **Credits:** 3 (2)
FIN 310 - Fundamentals of Finance **Credits:** 3
IFMG 300 - Information Systems: Theory and Practice **Credits:** 3
MGMT 310 - Principles of Management **Credits:** 3
MGMT 330 - Production and Operations Management **Credits:** 3
MGMT 495 - Business Policy **Credits:** 3
MKTG 320 - Principles of Marketing **Credits:** 3
QBUS 215 - Business Statistics **Credits:** 3

Major: 24

Required Courses:

MGMT 3xx/4xx **Credits:** 3

or
ACCT 311 - Cost Accounting **Credits: 3**

Advanced MGMT elective

or
ACCT 311 - Cost Accounting **Credits: 3**

MGMT 275 - Introduction to Entrepreneurship **Credits: 3**

MGMT 325 - Small Business Management **Credits: 3**

MGMT 403 - Small Business Planning **Credits: 3**

MGMT 492 - Small Business/Entrepreneurship Internship **Credits: 3-12**

Major Area Restricted Electives **Credits: 6**

Free Electives: 13-14

Total Degree Requirements: 120

(1) MATH 214 or MATH 216 or MATH 217.

(2) IFMG 110 cannot be used as a D/F repeat for COSC 101/IFMG 101.

General Management Track, Management, BS

While both management theory and application are taught in all of the department's majors, this track is distinguished by its emphasis on the achievement of organized goals through the efforts of organization members.

Liberal Studies: 47-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 107 - Business Mathematics **Credits: 3**

MATH 108 - Applications of Business Mathematics **Credits: 1**

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

ECON 121 - Principles of Macroeconomics **Credits: 3**

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 6

ECON 122 - Principles of Microeconomics **Credits: 3**

MATH 214 - Probability and Statistics for Business Majors **Credits: 3 (1)**

College: Business Administration Core: 36

Required Courses:

ACCT 201 - Accounting Principles I **Credits: 3**
ACCT 202 - Accounting Principles II **Credits: 3**
BCOM 321 - Business and Interpersonal Communications **Credits: 3**
BLAW 235 - Legal Environment of Business **Credits: 3**
COSC 101 - Computer Literacy **Credits: 3**
or
IFMG 101 - Computer Literacy **Credits: 3**
or
IFMG 110 - Business Spreadsheet Computing **Credits: 3 (2)**
FIN 310 - Fundamentals of Finance **Credits: 3**
IFMG 300 - Information Systems: Theory and Practice **Credits: 3**
MGMT 310 - Principles of Management **Credits: 3**
MGMT 330 - Production and Operations Management **Credits: 3**
MGMT 495 - Business Policy **Credits: 3**
MKTG 320 - Principles of Marketing **Credits: 3**
QBUS 215 - Business Statistics **Credits: 3**

Major: 24

Required Courses:

ECON XXX - Any advanced 300-400-level ECON course **Credits: 3**
MGMT 300 - Human Resource Management **Credits: 3**
MGMT 311 - Human Behavior in Organizations **Credits: 3**
MGMT 428 - Seminar in Management **Credits: 3**
MGMT 434 - Industrial Quality: Statistical Tools and Management **Credits: 3**
MGMT 451 - International Management **Credits: 3**
MGMT XXX - Any one MGMT course **Credits: 3**

Controlled Electives: 3

Any advanced business electives from 300-level courses or above. MGMT 493 may be used to meet this requirement. (3)

Free Electives: 12-13

Total Degree Requirements: 120

- (1) MATH 214 or MATH 216 or MATH 217.
- (2) IFMG 110 cannot be used as a D/F repeat for COSC 101/IFMG 101.
- (3) MGMT 275 will be considered an advanced business elective.

Human Resource Management, BS

The bachelor of science degree program in human resource management prepares individuals in both the theoretical and applied aspects of managing the human resources function in organizations as a generalist or specialist. Students will gain expertise in areas such as job design, staffing, training, compensation, and performance appraisal.

Liberal Studies: 47-48

As outlined in Liberal Studies Requirements section with the following specifications:

Mathematics:

MATH 107 - Business Mathematics **Credits:** 3
MATH 108 - Applications of Business Mathematics **Credits:** 1

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

ECON 121 - Principles of Macroeconomics **Credits:** 3
PSYC 101 - General Psychology **Credits:** 3
a Global and Multicultural Awareness course (recommended)

Liberal Studies Electives: 6

ECON 122 - Principles of Microeconomics **Credits:** 3
MATH 214 - Probability and Statistics for Business Majors **Credits:** 3 (1)

College: Business Administration Core: 36

Required Courses:

ACCT 201 - Accounting Principles I **Credits:** 3
ACCT 202 - Accounting Principles II **Credits:** 3
BCOM 321 - Business and Interpersonal Communications **Credits:** 3
BLAW 235 - Legal Environment of Business **Credits:** 3
COSC 101 - Computer Literacy **Credits:** 3
or
IFMG 101 - Computer Literacy **Credits:** 3
or
IFMG 110 - Business Spreadsheet Computing **Credits:** 3 (2)
FIN 310 - Fundamentals of Finance **Credits:** 3
IFMG 300 - Information Systems: Theory and Practice **Credits:** 3
MGMT 310 - Principles of Management **Credits:** 3
MGMT 330 - Production and Operations Management **Credits:** 3
MGMT 495 - Business Policy **Credits:** 3
MKTG 320 - Principles of Marketing **Credits:** 3
QBUS 215 - Business Statistics **Credits:** 3

Major: Human Resource Management: 24

Required Courses:

ECON 330 - Labor Economics **Credits:** 3

MGMT 300 - Human Resource Management **Credits: 3**
MGMT 400 - Compensation Management **Credits: 3**
MGMT 401 - Management Development and Training **Credits: 3**
MGMT 402 - Seminar in Human Resource Management **Credits: 3**
or
MGMT 428 - Seminar in Management **Credits: 3**
MGMT 405 - Organizational Staffing **Credits: 3**

Controlled Electives: 6

Two courses from the following:

ACCT 300
BCOM 342 - Intercultural Business Communication **Credits: 3**
ELR 480 - Introduction to Negotiations and Conflict Resolution **Credits: 3**
MGMT 311 - Human Behavior in Organizations **Credits: 3**
MGMT 406
MGMT 434 - Industrial Quality: Statistical Tools and Management **Credits: 3**
MGMT 451 - International Management **Credits: 3**
MGMT 452 - Comparative Management **Credits: 3**
MGMT 493 - Management Internship **Credits: 3-12**
PSYC 390 - Industrial-Organizational Psychology **Credits: 3**
PSYC 411 - Psychology of Women **Credits: 3**
SAFE 101 - Introduction to Occupational Safety and Health **Credits: 3**
SOC 340
SOC 348 - Sociology of Work **Credits: 3**
SOC 362 - Racial and Ethnic Minorities **Credits: 3**

Free Electives: 12-13

Total Degree Requirements: 120

- (1) MATH 214 or MATH 216 or MATH 217.
- (2) IFMG 110 cannot be used as a D/F repeat for COSC 101/IFMG 101.

International Business, BS

The bachelor of science degree program in international business offers students an opportunity to acquire a thorough understanding of managing global operations in the contemporary business environment. In addition, students develop skills in a traditional functional area (finance, human resources, marketing). The combination of these two objectives enables students to successfully perform in today's competitive global economy.

Liberal Studies: 47-48

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities:

PHIL 122 - Contemporary Moral Issues **Credits: 3**

Mathematics:

MATH 107 - Business Mathematics **Credits: 3**

MATH 108 - Applications of Business Mathematics **Credits: 1**

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

ECON 121 - Principles of Macroeconomics **Credits: 3**

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 6

ECON 122 - Principles of Microeconomics **Credits: 3**

MATH 214 - Probability and Statistics for Business Majors **Credits: 3 (1)**

No courses with MGMT prefix

College: Business Administration Core: 36

Required Courses:

ACCT 201 - Accounting Principles I **Credits: 3**

ACCT 202 - Accounting Principles II **Credits: 3**

BCOM 321 - Business and Interpersonal Communications **Credits: 3**

BLAW 235 - Legal Environment of Business **Credits: 3**

COSC 101 - Computer Literacy **Credits: 3**

or

IFMG 101 - Computer Literacy **Credits: 3**

or

IFMG 110 - Business Spreadsheet Computing **Credits: 3 (2)**

FIN 310 - Fundamentals of Finance **Credits: 3**

IFMG 300 - Information Systems: Theory and Practice **Credits: 3**

MGMT 310 - Principles of Management **Credits: 3**

MGMT 330 - Production and Operations Management **Credits: 3**

MGMT 495 - Business Policy **Credits: 3**

MKTG 320 - Principles of Marketing **Credits: 3**

QBUS 215 - Business Statistics **Credits: 3**

Foreign Language Requirement: 0-9

(3)

Foreign Residency Requirement

(4)

Major: International Business: 21

Required Courses:

ECON 345 - International Trade **Credits: 3**
MGMT 350 - International Business **Credits: 3**
or
MKTG 350 - International Business **Credits: 3**
MGMT 454 - International Competitiveness **Credits: 3**
MGMT 459 - Seminar in International Management **Credits: 3**

Concentration Area Courses: 9

(select one concentration; choose three of the four courses in the chosen area)

Finance Concentration:

FIN 320 - Corporate Finance **Credits: 3**
FIN 324 - Principles of Investments **Credits: 3**
FIN 410 - Financial Institutions and Markets **Credits: 3**
FIN 424 - International Financial Management **Credits: 3**

Human Resources Management Concentration:

MGMT 300 - Human Resource Management **Credits: 3**
MGMT 400 - Compensation Management **Credits: 3**
MGMT 402 - Seminar in Human Resource Management **Credits: 3**
MGMT 452 - Comparative Management **Credits: 3**

Marketing Concentration:

MKTG 321 - Consumer Behavior **Credits: 3**
MKTG 420 - Marketing Management **Credits: 3**
MKTG 421 - Marketing Research **Credits: 3**
MKTG 430 - International Marketing **Credits: 3**

Free Electives: 12-13

Total Degree Requirements: 120

(1) MATH 214 or MATH 216 or MATH 217.

(2) IFMG 110 cannot be used as a D/F repeat for COSC 101/IFMG 101.

(3) Candidates must demonstrate a conversational proficiency in a foreign language. This requirement may be met by (a) successful completion of 9 intermediate-level credits in a specific language, or (b) successful completion of an exemption or credit examination in lieu of the above. A foreign student, registered as such at IUP, whose acquired native language is other than English and who demonstrates an acceptable proficiency in English, can meet the foreign language requirement by successful completion of an exemption examination in the acquired native language.

(4) Candidates must document one semester of foreign residence (minimum of three months). Normally, the foreign residency requirement will be met in conjunction with a work experience, internship, or student exchange. A substitute cross-cultural experience may be permitted with the academic advisor's recommendation. The foreign language requirement is a prerequisite to the foreign residency requirement.

Management, Entrepreneurship and Small Business Management Track, BS

Management, General Management Track, BS

Supply Chain Management Track, Management, BS

Students in this track are well-grounded in both theory and application, focusing on production, operations, quality issues, and inventory and capacity management.

Liberal Studies: 47-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

- MATH 107 - Business Mathematics **Credits: 3**
- MATH 108 - Applications of Business Mathematics **Credits: 1**

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

- ECON 121 - Principles of Macroeconomics **Credits: 3**
- PSYC 101 - General Psychology **Credits: 3**
- a Global and Multicultural Awareness course (recommended)

Liberal Studies Electives: 6

- ECON 122 - Principles of Microeconomics **Credits: 3**
- MATH 214 - Probability and Statistics for Business Majors **Credits: 3 (1)**

College: Business Administration Core: 36

Required Courses:

- ACCT 201 - Accounting Principles I **Credits: 3**
- ACCT 202 - Accounting Principles II **Credits: 3**
- BCOM 321 - Business and Interpersonal Communications **Credits: 3**
- BLAW 235 - Legal Environment of Business **Credits: 3**
- COSC 101 - Computer Literacy **Credits: 3**
- or
- IFMG 101 - Computer Literacy **Credits: 3**
- or
- IFMG 110 - Business Spreadsheet Computing **Credits: 3 (2)**
- FIN 310 - Fundamentals of Finance **Credits: 3**
- IFMG 300 - Information Systems: Theory and Practice **Credits: 3**
- MGMT 310 - Principles of Management **Credits: 3**
- MGMT 330 - Production and Operations Management **Credits: 3**
- MGMT 495 - Business Policy **Credits: 3**
- MKTG 320 - Principles of Marketing **Credits: 3**
- QBUS 215 - Business Statistics **Credits: 3**

Major: 24

Required Courses:

MGMT 434 - Industrial Quality: Statistical Tools and Management **Credits: 3**

MGMT 437 - Supply Chain Modeling and Analysis **Credits: 3**

MGMT 438 - Seminar in Operations Management **Credits: 3**

or

MGMT 428 - Seminar in Management **Credits: 3**

MKTG 434 - Business Logistics: Technical Analysis and Applications **Credits: 3**

Controlled Electives:

One Course from the Following: 3

ECON 330 - Labor Economics **Credits: 3**

ECON 334 - Managerial Economics **Credits: 3**

Three Courses from the Following: 9

BCOM 342 - Intercultural Business Communication **Credits: 3**

IFMG 475 - Project Management and Implementation **Credits: 3**

MGMT 300 - Human Resource Management **Credits: 3**

MGMT 311 - Human Behavior in Organizations **Credits: 3**

MGMT 401 - Management Development and Training **Credits: 3**

MGMT 461 - Organizational Leadership Theory **Credits: 3**

or

MGMT 462 - Applied Business Leadership Skills **Credits: 3**

MGMT 481 - Special Topics in Management **Credits: 1-3**

MGMT 493 - Management Internship **Credits: 3-12**

QBUS 450 - Data Science for Business **Credits: 3**

SAFE 101 - Introduction to Occupational Safety and Health **Credits: 3**

Other courses as approved by the advisor

Free Electives: 12-13

Total Degree Requirements: 120

(1) MATH 214 or MATH 216 or MATH 217.

(2) IFMG 110 cannot be used as a D/F repeat for COSC 101/IFMG 101.

Minor

Management Minor

(1)

(for business majors in the ECOBIT only)

Required Courses:

MGMT 275 - Introduction to Entrepreneurship **Credits: 3**
MGMT 300 - Human Resource Management **Credits: 3**
MGMT 310 - Principles of Management **Credits: 3**
MGMT 434 - Industrial Quality: Statistical Tools and Management **Credits: 3**
MGMT 451 - International Management **Credits: 3**
One MGMT 1XX, 2XX, 3XX, or 4XX course 3cr

Total Minor Requirements: 18

(1) Minor course requirements must be completed with a minimum cumulative GPA of 2.0.

Marketing

Website: www.iup.edu/marketing

Parimal Bhagat, Chair

Bachelor of Science

Marketing, BS

The Bachelor of Science degree program in marketing is designed to prepare its majors for a wide range of careers in private and public sector marketing, including sales management, retailing, brand management, advertising, distribution and logistics, customer relationship management, marketing research, public relations, marketing for nonprofit organizations, e-commerce, and international marketing. The program focuses on integrating technical knowledge in all areas of marketing with analytical and communication skills to prepare students for the challenges of the global competition in the 21st century.

Liberal Studies: 47-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 107 - Business Mathematics **Credits: 3**
MATH 108 - Applications of Business Mathematics **Credits: 1**

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

ECON 121 - Principles of Macroeconomics **Credits: 3**
PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 6

ECON 122 - Principles of Microeconomics **Credits: 3**

MATH 214 - Probability and Statistics for Business Majors **Credits: 3 (1)**

College: Business Administration Core: 36

Required Courses:

ACCT 201 - Accounting Principles I **Credits: 3**

ACCT 202 - Accounting Principles II **Credits: 3**

BCOM 321 - Business and Interpersonal Communications **Credits: 3**

BLAW 235 - Legal Environment of Business **Credits: 3**

COSC 101 - Computer Literacy **Credits: 3**

or

IFMG 101 - Computer Literacy **Credits: 3**

or

IFMG 110 - Business Spreadsheet Computing **Credits: 3 (2)**

FIN 310 - Fundamentals of Finance **Credits: 3**

IFMG 300 - Information Systems: Theory and Practice **Credits: 3**

MGMT 310 - Principles of Management **Credits: 3**

MGMT 330 - Production and Operations Management **Credits: 3**

MGMT 495 - Business Policy **Credits: 3**

MKTG 320 - Principles of Marketing **Credits: 3**

QBUS 215 - Business Statistics **Credits: 3**

Major: Marketing: 24

Required Courses: 9

MKTG 321 - Consumer Behavior **Credits: 3**

MKTG 421 - Marketing Research **Credits: 3**

MKTG 450 - Marketing Strategy **Credits: 3**

Major Electives: 15

Select 15cr from the following:

MKTG 350 - International Business **Credits: 3**

MKTG 430 - International Marketing **Credits: 3**

MKTG 431 - Business-to-Business Marketing **Credits: 3**

MKTG 433 - Advertising **Credits: 3**

MKTG 434 - Business Logistics: Technical Analysis and Applications **Credits: 3**

MKTG 435 - Professional Selling and Sales Management **Credits: 3**

MKTG 436 - Retail Management **Credits: 3**

MKTG 437 - Services Marketing **Credits: 3**

MKTG 439 - Internet Marketing **Credits: 3**

MKTG 440 - Direct Marketing **Credits: 3**

MKTG 442 - Social Cause Marketing for Nonprofit Organizations **Credits: 3**

MKTG 443 - New Product Design and Branding **Credits: 3**

MKTG 444 - Green Marketing **Credits: 3**

MKTG 445 - Social Media Marketing **Credits: 3**

MKTG 448 - Brand Design **Credits: 3**

MKTG 481 - Special Topics I **Credits: 3**

MKTG 482 - Independent Study **Credits:** 3
MKTG 493 - Marketing Internship **Credits:** 3-12

Free Electives: 12-13

Total Degree Requirements: 120

- (1) MATH 214 or MATH 216 or MATH 217.
- (2) IFMG 110 cannot be used as a D/F repeat for COSC 101/IFMG 101.

Minor

Marketing Minor

- (1)
(for business majors and students majoring in fashion merchandising, sport administration, art, journalism and public relations, or hospitality management)

Required Courses:

MKTG 320 - Principles of Marketing **Credits:** 3
MKTG 321 - Consumer Behavior **Credits:** 3
Four additional MKTG courses **Credits:** 12

Total Minor Requirements: 18

- (1) Minor course requirements must be completed with a minimum cumulative GPA of 2.0.

College of Education and Communications

Lara M. Luetkehans, Dean

Amber Racchini, Dean's Associate for Academic Affairs
Holly J. Travis, Dean's Associate for Educator Preparation, Secondary Programs
Marcey L. Barna, Budget and Operations Manager
Jeffrey J. Fratangeli, Director of Recruitment and Public Relations

Website: www.iup.edu/education/

Since its founding in 1875 as the Indiana Normal School, Indiana University of Pennsylvania has been widely recognized for its excellent programs in teacher education. Although the scope of the university has been greatly expanded, the College of Education and Communications continues the tradition of preparing outstanding teachers to serve the students of the commonwealth and the nation.

The college comprises eight multidimensional departments and one center that offer 25 programs leading to bachelor's, master's, and doctoral degrees. Included in the college are Communication Disorders, Special Education, and Disability Services; Communications Media; Counseling; Developmental Studies; Educational and School Psychology; Professional Studies in Education; Student Affairs in Higher Education; and the Center for Career and Technical Personnel Preparation.

The college is well-known for its opportunities to integrate hands-on learning. More than 100 students enjoy early field experiences each semester. In addition, the college places roughly 100 student teachers each year in public schools that provide a full semester of supervised teaching experience. Students are encouraged to take advantage of a full range of activities offered in urban, rural, and multicultural settings.

Practical experiences are important for students majoring in communications media. Students in this program are prepared in one of the largest internship programs in Pennsylvania. They select supervised work experiences with agencies throughout the commonwealth and neighboring states; many students are so successful in their internship placements, they are hired immediately upon graduation.

Mission Statement

The college provides leading-edge development and growth opportunities for students and professionals in education and allied fields.

Vision Statement

The college will be known nationally and internationally for the preparation of practitioners in education to serve a global society. The college will be prepared to serve a clientele of graduate and undergraduate scholars from increasingly diverse backgrounds. Teacher-scholars will apply diversified delivery systems to instruction, research, and service to meet the contemporary societal challenges.

Degree Requirements

All bachelor's degree candidates must satisfactorily complete a minimum of 120 credits to include all Liberal Studies and major requirements. All bachelor of science in education degree candidates must also complete the IUP 3-Step Process for Teacher Education as defined by Chapter 354 of the Pennsylvania Education Code and in accordance with university policies.

Associations and Organizations

American Association of Colleges of Teacher Education (AACTE)
American Psychological Association (APA)
American Society for Training and Development (ASTD)
American Speech-Language-Hearing Association (ASHA)
Association for Childhood Education International (ACEI)
Council for Accreditation of Counseling and Related Educational Programs (CACREP)
Council for Exceptional Children (CEC)
Council of Education of the Deaf (CED)
National Association for the Education of Young Children (NAEYC)
National Association of School Psychologists (NASP)
National Broadcasting Society (NBS)
National Council of Social Studies
National Council of Teachers of Mathematics
National Council of Teachers of English
National Middle School Association (NMSA)
Pennsylvania Association of Colleges of Teacher Education (PAC-TE)
Pennsylvania Department of Education (PDE)
Society of Health and Physical Educators (SHAPE)
Teacher Education Council of State Colleges and Universities (TECSCU)

Undergraduate Degrees, Majors, Minors, Certificates and Concentrations

Bachelor of Arts: General Studies

Bachelor of Science: Communications Media (Media Marketing, Media Production, or Media Studies Tracks), Disability Services, Speech-Language Pathology and Audiology

Bachelor of Science in Education: Business Education, Early Childhood Education/Special Education, Early Childhood Education/Master of Education-Literacy, Middle-Level Education 4-8 with Mathematics, Science, Social Studies, or English/Language Arts Specialization, Special Education, Vocational/Technical Education

Associate of Arts: General Studies

Minors: Communications Media, Deaf Studies, Educational Psychology, Educational Technology, Special Education

Certificates: Audio Production, Autism, Behavior Analysis, Photography and Digital Imaging, Popular Music Studies, Secondary School Cooperative Education Teacher/Coordinator, Special Education

Track: College of Education and Communications Honors

K-12 and Secondary Education Programs: Art Education, Biology Education, Chemistry Education, Earth and Space Science Education, English Education, Family and Consumer Sciences Education, Health and Physical Education, Mathematics Education, Music Education, Physics Education, Social Studies Education, Spanish Education

Interdisciplinary Programs, Minors and Certificates

The interdisciplinary degree programs, minors, and certificates are multidisciplinary and are not specific to one university college. Visit [Interdisciplinary Programs](#) to view offerings and requirements

Graduate Programs and Certifications

Master of Education: Business Education, Education, Educational Psychology, Literacy, School Counseling, and Special Education

Master of Arts: Clinical Mental Health Counseling, Instructional Design and Technology, and Student Affairs in Higher Education

Master of Science: Speech-Language Pathology and Strategic Communications

Doctor of Education: Administration and Leadership Studies and Curriculum and Instruction

Doctor of Philosophy: Communications Media and Instructional Technology, Counselor Education and Supervision, School Psychology

Graduate-Level Certifications: Autism, Business Education, Developmental Educators, Elementary/Secondary Principal, Licensed Professional Counselor, Reading Specialist, School Counseling, Special Education, Superintendent's Letter of Eligibility, Supervisor- Pupil Personnel Services K-12

Information describing master's and doctoral programs in education may be found in the current issue of the *Graduate Catalog*.

Honors Track, College of Education and Communications

The College of Education and Communications Honors Program enables students to participate in advanced study in the areas of learning and instructional theory, motivation to learn, assessment of student learning, classroom management, and the psychology of adolescent education. The Honors Track is encouraged for exceptional students in all fields of education. Honors course work is recorded on university transcripts, and students completing the Education Honors Track will be recognized at departmental commencement ceremonies.

Eligibility and Requirements: This track is open by permission to all education majors. To apply, an application should be filed with the Educational and School Psychology Department chairperson. Students may apply upon acceptance to IUP, or current students may make application following completion of one semester of course work. Applicants must have a minimum 3.25 GPA in total university or high school course work to apply. Students accepted before taking EDSP 102 complete EDSP 102/H/; EDSP 477/H/; EDSP 373/H/, EDSP 378/H/; and EDSP 493/H/. Students accepted following completion of a nonhonors section of EDSP 102 will be required to take all three of the courses offered (EDSP 373/H/ and EDSP 378/H/) in addition to EDSP 477/H/ and the Honors Internship. Students must earn at least a B in each course completed for the track to proceed and must maintain a 3.25 cumulative GPA. To determine how Honors Track courses will be integrated into existing requirements for their major, students should consult their advisors.

Change of Major to a Teacher Education Program

Currently enrolled students who wish to make application for a teacher education program may do so via MyIUP. Secondary education programs are housed in the college of their respective discipline. A minimum cumulative GPA of 3.0 is required for all education majors by Chapter 354 of the Pennsylvania Education Code.

Students admitted to the new major will be advised by a faculty advisor in the major and permitted to register for major courses during the next registration period.

Students must comply with the IUP 3-Step Process for Teacher Education as appropriate to their current status. This information can be viewed on the College of Education and Communications website at www.iup.edu/education.

IUP 3-Step Process for Teacher Education

Step 1. Application for Teacher Education

Eligibility requirements for enrolling in the professional education sequence, which includes EDEX 103/EDEX 301, EDUC 242, EDUC 342, EDUC 442, EDSP 477:

A minimum of 48 earned credits and a 3.0 cumulative GPA

Successful completion of the following (scores may be mixed and matched): The Pre-Professional Academic Performance Assessment (PAPA), Praxis Core, SAT, and/or ACT exams with the minimum passing scores established by the Pennsylvania Department of Education.

Completion of the following courses with a minimum grade of "C":

ENGL 101

ENGL 121 for all majors, except; ENGL 122 for ENGL and MUHI 102 for MUED

EDSP 102

ACE 103 (or major program requirement in lieu of ACE 103); includes satisfactory evaluation of Step 1 LiveText portfolio

6 credits in mathematics (level 101 or higher)

Act 34 criminal background check (must be renewed annually)

Act 151 child abuse clearances (must be renewed annually)

Act 24 (PDE-6004) arrest or conviction report (must be renewed annually)

Act 114 FBI fingerprinting (continuing enrollment in IUP Teacher Preparation Program is required for fingerprinting results to remain valid; some districts/sites require an updated ACT 114 within the year)

Documented completion of ACT 126 training: www.reportabusepa@pitt.edu (must be retaken annually)

TB test (results must be current prior to entering schools/annually; some districts/sites require a two-step TB)

Speech and hearing test (one time only)

Proof of liability insurance (annual update required or join multiple years); PSEA student membership or private insurance (must have a minimum of \$1,000,000 per claim and an aggregate of \$3,000,000 per occurrence if obtained via private insurance)

Satisfactorily completed essay

Advisor's recommendation and signature

Documents (Clearances, TB results, and liability insurance) should be updated and uploaded into CastleBranch

Results of Step 1 approval: Ability to register for: EDUC 242 Pre-Student Teaching I, EDUC 442 School Law, and other professional education courses

IUP education majors are encouraged to take the PAPA or Praxis Core as soon as they are prepared for the exams. Extensive review materials and specialized workshops are available. Students who are not successful after five attempts are required to meet with the associate dean for Educator Preparation for a consultation.

Step 2. Application for Student Teaching

Eligibility requirements for student teaching placement:

Successful completion of Step 1

Maintenance of a cumulative GPA of 3.0

Current Act 34 clearance (must be renewed annually)

Current Act 151 clearance (must be renewed annually)

Current Act 114 clearance (must be renewed annually)

Current Act 24 (PDE-6004) arrest or conviction report (must be renewed annually)

Current documentation of completion of ACT 126 training: www.reportabusepa@pitt.edu (must be renewed annually)

Current TB test (results must be current prior to entering schools /annually; some districts/sites require a two-step TB)

Successful completion of ALL required PRAXIS II or PECT (Pennsylvania Educator Certification Tests) Exams (the PRAXIS and PECT cut-off scores for each test must be at or above the current PDE established passing scores at the time a candidate applies for Pennsylvania Teacher Certification)

Proof of liability insurance (annual updated required);- PSEA membership or private insurance (must have a minimum of \$1,000,000 per claim and an aggregate of \$3,000,000 per occurrence if obtained via private insurance)

Completion of all major courses and methods courses with a minimum grade of "C"

Completion of liberal studies science courses with a minimum grade of "C"

Advisor's or Program Coordinator's recommendation and signature

Results of Step 2 approval: Ability to register for student teaching

Step 3. Application for Graduation and Pennsylvania Teacher Certification

Eligibility requirements for graduation:

Successful completion of Step 2

Successful completion of student teaching with a grade of "C" or better

Maintenance of a cumulative GPA of 3.0

** If needed verification of sliding scale Praxis 2 or PECT results based on final posted GPA

Final satisfactory review of the LiveText Teacher Work Sample (submitted in LiveText) 9/11/2018

Completed application for graduation

Completed application for Pennsylvania Teacher Certification

Copy of TIMS coversheet from PDE website

Copy of IUP Marketplace receipt for certification processing

The recommendation of designated student teaching supervisor and program coordinator

The recommendation of the IUP Teacher Certification officer Results of Step 3 approval: Recommendation to PA Department of Education for Teacher Certification

Appeal Provision

A student who believes that any requirement of this policy has been inequitably applied or that he/she merits special consideration may appeal through the proper sequence of channels: academic advisor, chairperson, and finally the associate dean for Educator Preparation. Appeals must be made before the end of the next regular academic semester following the application.

Every effort should be made to resolve the appeal through the described process. If, at the conclusion of the appeals process, the student is still in disagreement with the findings, the student may request review before the Teacher Education Appeals Committee of the Academy for Teacher Preparation. The committee will be composed of three members representing the faculty of the Academy for Teacher Education Preparation, the Teacher Education Coordinator Council, and senior teacher preparation students.

To initiate an appeal, the student must file a form obtained at the Office of Educator Preparation. Appeals will be heard only during the regular academic semester. The student will be expected to submit written documentation of his/her complaint about the process of review for continuation or eligibility in the Educator Preparation program. The committee will review the materials and make its recommendation to the associate dean for Educator Preparation. A final decision rests with the associate dean for Educator Preparation, who is the certification officer.

Federal Higher Education Act Title II

This act requires all institutions that educate teachers to publish annually the passing rates on Praxis tests for their program completers. The annual report for IUP can be found on the website www.iup.edu/education.

Student Teaching

Student teaching is designed to be the culminating learning experience for prospective teachers. Student teachers practice teaching and managing a classroom under the supervision of a full-time master teacher in an off-campus center. A university supervisor is assigned to work with individual student teachers and their cooperating master teachers. To gain admission to student teaching, applicants must have achieved a minimum cumulative GPA of 3.0. In addition, students must complete all requirements of the 3-Step Process and should complete all other components of the Liberal

Studies and professional core before student teaching. Some programs have standards above the minimum 3.0 cumulative GPA and/or course grade expectations above the minimum grade of "C." Each student should counsel with his/her advisor for information about specific program requirements related to qualification for student teaching. He or she should also check the College of Education and Communications web pages regularly for the most current information (www.iup.edu/education).

Student teaching is the capstone experience in the program of the emerging professional educator. Student teaching assignments are the responsibility of the university. To avoid conflicts of interest, students will not be assigned to districts from which they graduated or to districts in which they permanently reside or to schools in which an immediate family member is employed. Exceptions to this policy may be made in large urban school districts such as Pittsburgh and Philadelphia, where there are numerous elementary and secondary schools so avoidance of assigning student teachers to their "home school area" can be achieved. Any exception to this policy must be approved by the dean, College of Education and Communications, or his/her designee. All official policies and procedures, regarding the student teaching experience are included as part of the college's official *Handbook for Student Teaching*. The handbooks are available for download as part of the Educator Preparation website at www.iup.edu/teachereducation.

All teacher education programs leading to a certificate issued by the Pennsylvania Department of Education require that candidates complete field placements including student teaching in a school setting or intermediate unit. Under current law, no placement can be made until a candidate presents Pennsylvania Criminal Record (Act 34) and Child Abuse Clearances (Act 151), Arrest and Conviction Report (Act 24), FBI Fingerprinting Record (Act 114), and evidence of completion of on-line training for Act 126. Candidates for these programs should be aware that some districts or intermediate units may not accept placements if any criminal record is reflected on these background checks. Candidates with a criminal record, even a summary offense, are asked to disclose this history to their program upon entry so that a determination can be made about whether placement will be possible. Some serious offenses, typically involving child welfare, preclude state certification. Students who do not provide the required background checks or for whom the Educator Preparation office cannot find an acceptable placement will be terminated from the program. Copies of candidate clearances must be on file with the Educator Preparation office before the student's beginning any school or intermediate unit placement.

Field Placements

The Office of Educator Preparation determines final placements for all fieldwork conducted in the public schools. In accordance with university policy, students must be officially enrolled in the course for which the fieldwork is being done. Students entering a classroom without being duly registered are in violation of university policy and may place themselves at risk legally. Therefore, registration for all field placements is mandatory.

All official policies and procedures for field experiences are included as part of the Field Experience I and II handbook, available for download as part of the Educator Preparation website at www.iup.edu/teachereducation.

Removal of a Student Teacher from a Student Teaching Placement

The policy for the removal of a student teacher from a student teaching placement can be found at the website www.iup.edu/education.

Certification Requirements

College of Education and Communications requirements for recommendation for certification as a teacher, as well as the intermediate steps leading to commonwealth certification, are outlined in the 3-Step Process. The requirements include the following:

- A minimum grade of "C" in all professional education courses and a 3.0 cumulative GPA
- Review and recommendation by the major academic advisor indicating completion of all university and departmental teacher education requirements
- Completion of student teaching with a minimum grade of "C"
- Successful completion of the PAPA, Praxis II, or PECT, and Praxis Specialty Area Tests
- Successful completion of PDE Form 430
- Competency in working with students with special needs (special education)
- Completion and submission of electronic portfolio, including portfolio evaluation of teacher work sample

Applications for certification cannot be processed until the student completes the BSED degree or its equivalent.

Commonwealth Requirements for Teacher Certification

(Excludes Vocational Instructional Certification. See "Center for Career and Technical Personnel Preparation.")

Certification standards for commonwealth public school teachers are established by the Pennsylvania Department of Education and the Pennsylvania Board of Education. The academic advisor of the student's major department must verify for the dean of the College of Education and Communications that all academic requirements are met. The student's name is then placed on the graduation list.

Applicants for certification must sign a statement attesting to United States citizenship. Applicants who are not citizens must have an immigrant visa that permits them to seek employment within the United States, and they must have declared the intent to become citizens of the United States. Applicants must also submit a physical examination report and certify they are not in the habit of using narcotic drugs in any form, do not use excessive amounts of intoxicating beverages, are not currently under indictment by legal authorities, and have not been convicted of a criminal offense.

Applicants who are unable to meet one or more of these requirements must submit a full explanation with the application. In addition, they must attest to the fact that all information supplied in the application is accurate.

The Pennsylvania Department of Education issues an Instructional I certificate to beginning teachers upon graduation from and recommendation by the College of Education and Communications.

Professional Certification Application Fee

All applicants for teacher certification or professional education certifications from the Commonwealth of Pennsylvania through IUP will be assessed a \$260 application fee. Applicants for add-on and second certifications processed through IUP will also be assessed this fee. Requests for processing out-of-state teacher certification applications will be assessed a \$35 processing fee per request.

Centers and Clinics

The six centers and one clinic supported by the college offer a variety of services to the university community and citizens of the Commonwealth of Pennsylvania to include diagnostic testing, remedial services, assessment, and instruction.

The **Speech, Language, and Hearing Clinic** is staffed by speech-language pathology faculty and supervised graduate students working toward advanced degrees in speech-language pathology. Using state-of-the-art equipment, clinic personnel provide diagnosis of speech problems and hearing tests and evaluations, as well as a regular program of therapy for clients. As part of this program, clinic staff members provide testing and necessary therapeutic services to all teacher education candidates, who must meet strict speech and hearing clearances. Regularly enrolled students at IUP, including all teacher certification candidates, are eligible to receive these services without charge.

The **Child Study Center** provides opportunities for school psychology graduate students in the post-master's certification and doctoral programs to acquire professional skills under the supervision of certified faculty supervisors. Clinic personnel provide psychoeducational assessment for children and adolescents with learning and/or behavior problems. They also provide consultation for parents and public-school personnel involved with these children.

The **Center for Media Production and Research** provides IUP students with real-world experiences in preproduction, production, and postproduction of digital media. Its primary technologies are advanced video techniques, such as green screen and digital video recording, but also include related media technologies such as animation, digital photography, video streaming, advanced audio production, and interactive software construction with video, audio, or animation components. The center supports the university and improves the region's quality of life by providing clients with advanced digital media products and by improving the overall climate for technology companies in the region.

The **Labyrinth Center** provides a comprehensive and holistic approach to support IUP students with Autism Spectrum Diagnosis (ASD) as they build relationships, gain independence, experience academic success, and graduate from IUP with the professional and personal skills needed to embark on a fulfilling life and career.

The **Bill and Judy Scheeren Literacy Center**, housed within the Department of Professional Studies in Education, provides opportunities for graduate students in the MEd— Literacy program to gain experience toward a Reading Specialist Certification. The center offers assessment and instruction in reading and writing for children and adolescents. These instructional sessions are offered in the fall, spring, and summer. Family literacy services are also available.

The **Center for Creativity and Change** seeks to advance the knowledge base of undergraduate and graduate students as well as mental health professionals through the promotion and creation of professional trainings. The center is staffed by faculty members from the Department of Counseling.

Specialized Instructional Facilities

The **Audio Studios** has multitrack analog recording and digital capabilities. Students are able to digitally master professional-quality tracks. Both analog and digital facilities are housed in sound-dampened studios and supplemented by radio production and recording studios for medium- and small-group recording sessions.

The **Graphics Multimedia Lab** provides a variety of software applications, black-and-white and color printing capabilities, color scanner, and a negative film scanner. The facility is used for instruction in graphics, as well as multimedia production.

The **Photography Studio** provides industry-standard photography studio equipment for students to create photographs in custom-controlled environments.

The **Radio Station** at IUP, WIUP-FM, is a 1600-watt, noncommercial, student-operated facility. Students from a variety of majors volunteer as DJs and news and sports staff members. There are also many opportunities for students to host a variety of different types of music shows.

The **Television Studio, IUP-TV**, broadcasts over a cable system that has a potential audience of 100,000 people. IUP-TV has approximately 100 students involved in management and production. The facility is student run with a faculty advisor and features state-of-the-art hardware and software.

Center for Career and Technical Personnel Preparation

Website: www.iup.edu/careerteched

Monica Murdoch, Chair

The Career and Technical Professional Studies program offers undergraduate curricula that prepare in-service teachers for career and technical education. Programs may lead to either a Bachelor of Science in Education with certification or to professional certification only. Program graduates have a broad range of employment opportunities as teachers/trainers in secondary schools, career and technical schools, postsecondary schools, and business and industry.

Certification to teach career and technical education in the commonwealth's secondary schools is issued to individuals who meet statutory requirements, demonstrate occupational/technical proficiency on a nationally standardized occupational competency examination (which includes documenting four years of wage earning experience) and complete 60* credits of the Pennsylvania Department of Education's approved university program.

Certification to serve as a cooperative education teacher-coordinator in the commonwealth's secondary schools can be earned by completing a program of studies tailored to each student's individual background and professional needs. The program prepares individuals for managing industrial cooperative training and school-to-work transitional experiences. For people holding a valid Pennsylvania Instructional Certificate, the program of studies will be individualized based on educational credits earned.

Each program requires completion of the following credits: Bachelor of Science in Education (120cr), cooperative education teacher/coordinator certification (15cr), and vocational-technical education certification (60cr*).

Bachelor of Science in Education

Vocational-Technical Education, BSED

Liberal Studies: 43-44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 151 - Elements of Mathematics I **Credits: 3**

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 3

no courses with VOED prefix

College: 17

Professional Educational Sequence:

ACE 103 - Digital Instructional Technology **Credits: 3**

EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits: 2**

EDEX 323 - Instruction of English Language Learners with Special Needs **Credits: 2**

EDEX 458 - Transition Assessment and Planning for Youth with Disabilities **Credits: 3**

EDSP 102 - Educational Psychology **Credits: 3**

EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**

EDUC 442 - School Law **Credits: 1**

Major: 25

Required Courses:

VOED 101 - Introduction to Career and Technical Education **Credits: 1**

VOED 102 - Instructional Planning in the Career and Technical Classroom **Credits: 2**

VOED 103 - Strategies for Teaching Career and Technical Education **Credits: 3**

VOED 201 - Making Accommodations for Students with Special Needs in the Career and Technical Classroom **Credits: 1**

VOED 202 - Industry Linkages for Career and Technical Programs **Credits: 3**

VOED 203 - Incorporating Reading and Communications Strategies in the Career and Technical Classroom **Credits: 3**

VOED 301 - Integrating Math and Science in Career and Technical Education **Credits: 3**

VOED 302 - Career Education in the Career and Technical Classroom **Credits: 3**

VOED 404 - Research in Career and Technical Education **Credits: 3**

VOED 405 - Professional Seminar in Career and Technical Education **Credits: 3**

Other Requirements: 24

Free Electives: 9-11

Total Degree Requirements: 120

Certificate and Certification Programs

Secondary School Cooperative Education Teacher/Coordinator Certification

(1)

Existing Pennsylvania teaching certificate (Vocational Instructional I or II certificate or Instructional I or II certificate)

Required Courses:

VOED 402 - Special Topics in Vocational Pedagogical Preparation **Credits:** 1-15

Total Certification Requirements: 15

(1) Student may be exempt from some credit requirements based on proof of previous coursework.

Vocational-Technical Education Certification

Liberal Studies: 15-16

As follows:

English:

ENGL 101 - Composition I **Credits:** 3

Humanities:

One course from list

Mathematics:

MATH 151 - Elements of Mathematics I **Credits:** 3

Natural Science:

One course, lab or non-lab

Social Science:

PSYC 101 - General Psychology **Credits:** 3

College: 17

Professional Educational Sequence:

ACE 103 - Digital Instructional Technology **Credits:** 3

EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits:** 2

EDEX 323 - Instruction of English Language Learners with Special Needs **Credits:** 2

EDEX 458 - Transition Assessment and Planning for Youth with Disabilities **Credits:** 3

EDSP 102 - Educational Psychology **Credits:** 3

EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits:** 3

EDUC 442 - School Law **Credits:** 1

Major: 25

Required Courses:

- VOED 101 - Introduction to Career and Technical Education **Credits: 1**
- VOED 102 - Instructional Planning in the Career and Technical Classroom **Credits: 2**
- VOED 103 - Strategies for Teaching Career and Technical Education **Credits: 3**
- VOED 201 - Making Accommodations for Students with Special Needs in the Career and Technical Classroom **Credits: 1**
- VOED 202 - Industry Linkages for Career and Technical Programs **Credits: 3**
- VOED 203 - Incorporating Reading and Communications Strategies in the Career and Technical Classroom **Credits: 3**
- VOED 301 - Integrating Math and Science in Career and Technical Education **Credits: 3**
- VOED 302 - Career Education in the Career and Technical Classroom **Credits: 3**
- VOED 404 - Research in Career and Technical Education **Credits: 3**
- VOED 405 - Professional Seminar in Career and Technical Education **Credits: 3**

Free Electives: 2-3

Total Certification Requirements: 60

Communication Disorders, Special Education, and Disability Services

Website: www.iup.edu/special-ed

Lori Lombard, Chair

This department offers the bachelor of science in education degree program with a major in special education. Bachelor of science degree programs with a majors in disability services and in speech-language pathology and audiology are also offered. A bachelor of science in education degree program in with a major in early childhood education/special education is offered in conjunction with the Department of Professional Studies in Education. Each major follows a prescribed sequence of courses.

The following grade policy applies to two programs of study in the department: Special Education and Speech-Language Pathology and Audiology. Individual students may appeal any aspect of the policy by making a formal written request to the Departmental Appeals Committee.

No more than one "D" in major courses will be accepted toward graduation and certification.

No "D" is permitted as the final recorded grade in any of the following courses: EDEX 425, EDEX 435, EDEX 493, EDUC 421, EDUC 461, and SPLP 122.

The following enrollment policy applies to two undergraduate programs in the department: Special Education and Speech-Language Pathology and Audiology. To enroll in a 300- or 400-level course in those programs, a student must have a minimum 3.0 cumulative GPA, must meet the other provisions of the 3-Step Process for Teacher Education, and must either be a departmental major or have permission of the department chair.

Bachelor of Science

Disability Services, BS

Completion of this multidisciplinary curriculum in educational, social, and natural sciences prepares graduates to work as professionals serving individuals with disabilities in a wide array of public- and private-sector agencies and service providers, including adult mental health (MH) programs. Students who complete the program will earn a bachelor of science degree and will be prepared for employment as instructional assistants in public or private schools, as therapeutic staff support personnel, or in a wide variety of capacities in MH programs, community-based employment/living programs, early intervention programs, residential treatment programs, preschool/day care programs, and other agency service providers for individuals with disabilities. Disability Services majors must achieve and maintain a 2.75 overall GPA.

Liberal Studies: 43-44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

Social Science:

PSYC 101 - General Psychology **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

Liberal Studies Elective: 3

CDFR 224 - Marriage and Family Relations **Credits: 3**

Major: 49

Required Courses:

CDFR 218 - Child Development **Credits: 3**

CDFR 310 - Child Observation and Assessment **Credits: 3**

CDFR 315 - Introduction to Early Intervention **Credits: 3**

DISB 440 - Ethical and Professional Behaviors **Credits: 1**

DISB 493 - Internship/Field Training **Credits: 12**

EDEX 111 - Introduction to Exceptional Persons **Credits: 3**

EDEX 340 - Introduction to Behavior Management in Special Education **Credits: 3**

EDEX 415 - Preschool Education for Children with Disabilities **Credits: 3**

EDEX 458 - Transition Assessment and Planning for Youth with Disabilities **Credits: 3**

EDEX 460 - Family Perspectives on Disability **Credits: 3**

EDEX 469 - Education of Persons with Emotional/Behavioral Disorders, Learning Disabilities or Brain Injury **Credits: 3**

EDEX 478 - Education of Persons with Mental Retardation/Developmental Disabilities and Physical/ Multiple Disabilities **Credits: 3**

EDHL 114 - Introduction to Deaf and Hard-of-Hearing Persons **Credits: 3**

EDHL 115 - Introduction to American Sign Language **Credits: 3**

Other Requirements: 6

Professional Sequence:

EDEX 103 - Special Education Technology **Credits: 3**

or

ACE 103 - Digital Instructional Technology **Credits: 3**

EDSP 102 - Educational Psychology **Credits: 3**

Free Electives: 21-22

(1)

Students may use these 18cr toward study of a minor discipline and/or as free electives.

Total Degree Requirements: 120

(1) It is recommended that students pursue minor studies in one of the following: Child Development and Family Relations (18cr), Educational Psychology (18cr), Psychology (18cr), or Sociology/Disability Services or Human Services (18cr).

Speech-Language Pathology and Audiology, BS

Completion of the sequence of courses in speech-language pathology and audiology serves as a preprofessional program for students planning to become practicing speech-language pathologists or audiologists. Students entering the undergraduate program should be aware of the following:

IUP is accredited by the Council on Academic Accreditation of the American Speech-Language-Hearing Association and qualifies a person for the Certificate of Clinical Competence from the American Speech-Language-Hearing Association and Pennsylvania State Licensure. National certification, state licensure, and PDE Educational Specialist Certification as a School Speech-Language Pathologist are available only to holders of the master's degree in speech-language pathology.

Students will need a minimum cumulative GPA greater than 3.5 to qualify for admission to most graduate schools.

Upon completion of a master's degree in speech-language pathology at IUP, students will be prepared to provide services in work settings such as hospitals, community clinics, public school and early intervention programs, and rehabilitation settings.

To be eligible to register for 300- and 400-level courses in the major, students must meet the junior standing requirement of a minimum overall cumulative GPA of 3.25 and verification by the academic advisor that the program's dispositions are met or exceeded. Students must also complete 25 hours of observation in speech-language pathology or audiology (depending upon career objectives) supervised by an IUP faculty member who holds a Certificate of Clinical Competence. These are completed through enrollment in SPLP 310 and SPLP 410.

Transfers, changes of major, and post-baccalaureate admissions into the undergraduate Speech-Language Pathology and Audiology program will be approved on a competitive basis. For a prospective student to be considered for admission on those dates, the minimum criteria include a minimum cumulative GPA of 3.0 or greater in all undergraduate course work, passing standardized exam scores, an interview, and an essay. Please contact the Speech-Language Pathology and Audiology program director for more information.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

Natural Science:

BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**

Any PHYS or CHEM

Recommended:

PHYS 105 - The Physics of Light and Sound **Credits: 3**

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 6

PSYC 215 - Developmental Psychology **Credits: 3**

MATH 217 - Probability and Statistics **Credits: 3**

No courses with SPLP prefix

Major: 44

Required Courses:

EDEX 111 - Introduction to Exceptional Persons **Credits: 3**
SPLP 111 - Introduction to Communication Disorders **Credits: 3**
SPLP 122 - Clinical Phonology **Credits: 3**
SPLP 222 - Introduction to Audiology **Credits: 3**
SPLP 242 - Speech Science **Credits: 3**
SPLP 251 - Anatomy and Physiology of Speech and Swallowing **Credits: 3**
SPLP 275 - Language Science **Credits: 3**
SPLP 310 - Observation in Communication Disorders I **Credits: 1 (1,2)**
SPLP 311 - Aural Rehabilitation **Credits: 3**
SPLP 334 - Language Development **Credits: 3**
SPLP 342 - Neuroscience for Communication Disorders **Credits: 3**
SPLP 401 - Communication and Social Competence for Children with Autism **Credits: 3**
SPLP 406 - Clinical Management of Articulation and Language **Credits: 3**
SPLP 408 - Organic Disorders **Credits: 3**
SPLP 410 - Observation in Communication Disorders II **Credits: 1 (1)**
SPLP 412 - Organization and Administration of Speech, Language, and Hearing Programs **Credits: 3**

Free Electives: 29-30

EDSP 102 - Educational Psychology **Credits: 3**
SPLP 312 - Advanced Audiology and Hearing Disorders **Credits: 3**
SPLP 420 - Undergraduate Clinic **Credits: 1-3 (2)**
SPLP 422 - Central Auditory Processing Disorders in the Educational Setting **Credits: 3**

Total Degree Requirements: 120

(1) Junior standing—attainment of a minimum GPA of 3.25 after the completion of 60cr and verification by the academic advisor that the program's dispositions are met or exceeded—is required to enroll in 300- and 400-level SPLP courses.

(2) Prior to enrollment in SPLP 420 students must successfully obtain: Act 34 and Act 151 clearances, Act 24 Arrest or Conviction Report, Act 114 FBI Fingerprinting (continuing enrollment in IUP is required for fingerprinting to remain valid), Title IX mandated reporter training, TB Test (must be renewed annually), speech and hearing screening. Students must also become a national member of NSSLHA and obtain student clinician professional liability coverage.

Bachelor of Science in Education

Special Education PreK-12, BSED

Completion of the sequence of study in this major leads to Pennsylvania Department of Education special education certifications in preK-8 and 7-12. Students will be prepared to teach persons with intellectual disabilities, autism, developmental disabilities, learning disabilities, brain injuries, emotional/behavioral disorders, physical disabilities, and multiple disabilities. Academic course work and field experiences are integrated within the course of study.

Students entering the program should be aware of the following:

Students **must** complete a fifth year by applying for early admission into to the MEd—Literacy and or Reading Specialist Certification program. Students must meet all reading specialist certification requirements.

Upon completion of the reading specialist requirements and passing the Special Education PreK-8 and 7-12 exams and Reading Specialist exam, students can then apply for special education certification.

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 151 - Elements of Mathematics I **Credits: 3**

Natural Science:

Laboratory Science sequence required (SCI 105-SCI 107 and SCI 117 recommended)

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 3

MATH 152 - Elements of Mathematics II **Credits: 3** (required)

College: 24

Preprofessional Education Sequence:

EDEX 103 - Special Education Technology **Credits: 3**

EDSP 102 - Educational Psychology **Credits: 3**

Professional Education Sequence:

EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**

EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**

EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**

EDUC 421 - Student Teaching **Credits: 5-6**

EDUC 441 - Student Teaching **Credits: 5-12**

EDUC 442 - School Law **Credits: 1**

Major: 55

Required Courses:

EDEX 111 - Introduction to Exceptional Persons **Credits: 3**

EDEX 114 - Atypical Development in Infants, Children, and Adolescents **Credits: 3**

EDEX 221 - Methods of Teaching Mathematics to Secondary Students with Disabilities **Credits: 2**

EDEX 223 - Reading Methods and Strategies for Students with Disabilities **Credits: 3**

EDEX 321 - Methods of Teaching Language Arts to Persons with Disabilities **Credits: 3**

EDEX 323 - Instruction of English Language Learners with Special Needs **Credits: 2**

EDEX 340 - Introduction to Behavior Management in Special Education **Credits: 3**

EDEX 415 - Preschool Education for Children with Disabilities **Credits: 3**

EDEX 425 - Methods and Curriculum (Mild-Moderate Disabilities) **Credits: 3**

EDEX 435 - Methods and Curriculum—Severe Cognitive Disabilities **Credits: 3**

EDEX 440 - Ethical and Professional Behavior **Credits:** 1
EDEX 458 - Transition Assessment and Planning for Youth with Disabilities **Credits:** 3
EDEX 460 - Family Perspectives on Disability **Credits:** 3
EDEX 469 - Education of Persons with Emotional/Behavioral Disorders, Learning Disabilities or Brain Injury **Credits:** 3
EDEX 478 - Education of Persons with Mental Retardation/Developmental Disabilities and Physical/ Multiple Disabilities **Credits:** 3
MATH 330 - Teaching Mathematics in the Elementary School **Credits:** 3

Reading Specialist: 3

LTCY 600 - Foundations of Literary Instruction **Credits:** 3 (1)

Total Degree Requirements: 123

(1) This course satisfies 3cr of the reading specialist requirements.

Special Education, Early Childhood Education, BSED

This Early Childhood/Special Education (ECSP) program is designed to assist students in becoming highly qualified, competent, and effective teachers of all learners in grades PreK through 4. The program has an emphasis on best practices in both early childhood education and special education. Students in this program will meet the academic requirements for Pennsylvania certification in PreK to grade 4 as well as special education PreK to grade 8.

This program, combining course work in both early childhood education and special education with extensive field experiences, prepares students to be professional educators who are well-qualified to utilize appropriate techniques and strategies to expand all children's cognitive, social, emotional, and physical development. Field experiences will take place in a variety of settings encompassing diverse learning needs as well as learners in birth to grade 3 classrooms, preschool classrooms, K-1 classrooms, and classrooms in grades 2-4.

Admission to this program requires entering students to meet the guidelines for admission to the College of Education and Communications. Additionally, students must achieve a 3.0 GPA to apply for Step 1 of the Teacher Education process, to enroll in major courses, to student teach, and to be recommended for certification. Students must meet the requirements leading to teacher certification as outlined in this catalog.

The Urban Track, within the ECSP program offered by the departments of Professional Studies in Education and Communication Disorders, Special Education, and Disability Services, prepares students for teaching in urban school districts, especially in low-income communities with high minority enrollments where the need for high-quality teachers is great. Course work and field experiences emphasize the historical, economic, political, and socioeconomic contexts of urban schools and seek to develop within future teachers the skills, knowledge base, and sensitivities for working with students whose backgrounds and life experiences often differ in significant ways from their own.

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 43.5

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities:

HIST 196 - Explorations in US History **Credits:** 3

Mathematics:

MATH 151 - Elements of Mathematics I **Credits:** 3

Natural Science:

(3 of 4 required)

SCI 101 - Fundamentals of Physics **Credits: 2.5**
SCI 102 - Fundamentals of Chemistry **Credits: 2.5**
SCI 103 - Fundamentals of Earth and Space Science **Credits: 2.5**
SCI 104 - Fundamentals of Environmental Biology **Credits: 2.5**

Social Science:

GEOG 101 - Environment and Society **Credits: 3**

GEOG 102 - Geography of the United States and Canada **Credits: 3**
or
GEOG 104 - World Geography: Global Context **Credits: 3**
PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 3

MATH 152 - Elements of Mathematics II **Credits: 3**

College: 25

Preprofessional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits: 3**
or
EDEX 103 - Special Education Technology **Credits: 3**
EDSP 102 - Educational Psychology **Credits: 3**

Professional Education Sequence:

EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**
EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**
EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**
EDUC 442 - School Law **Credits: 1**
EDUC 461 - Student Teaching **Credits: 6**
EDUC 471 - Student Teaching **Credits: 6**

Major: 61

Required Courses:

- (1)
- ECED 117 - Family, Community, and School Relationships in a Diverse Society **Credits: 2**
 - ECED 200 - Introduction to Early Childhood Education **Credits: 3**
 - ECED 221 - Literature for the Young Child and Adolescent **Credits: 3**
 - ECED 250 - Language Development **Credits: 3**
 - ECED 280 - Maximizing Learning: Engaging All PreK to Grade 4 Learners **Credits: 3**
 - ECED 310 - Science, Health, and Safety for All PreK to Grade 4 Learners **Credits: 3**
 - ECED 351 - Literacy for the Emergent Reader: PreK to Grade 1 Learners **Credits: 3**
 - ECED 411 - Social Studies for All PreK to Grade 4 Learners **Credits: 3**
 - ECED 451 - Literacy for the Developing Reader: Grades 2-4 Learners **Credits: 3**
 - ECSP 112 - Growth and Development: Typical and Atypical **Credits: 3**

ECSP 314 - Creative Experiences and Play for All PreK to Grade 4 Learners **Credits: 3**
ECSP 340 - Introduction to Classroom and Behavior Management **Credits: 3**
EDEX 110 - Introduction to Special Needs PreK to Grade 8 **Credits: 3**
EDEX 269 - Identifying and Understanding Children with Academic and Social Learning Needs from Preschool through Adolescence **Credits: 3**
EDEX 278 - Identifying and Understanding Children with Significant Adaptive Behavior and Learning Needs from Birth through Adolescence **Credits: 3**
EDEX 323 - Instruction of English Language Learners with Special Needs **Credits: 2**
EDEX 424 - Strategic Assessment and Instruction in Expository Texts **Credits: 3**
EDEX 435 - Methods and Curriculum—Severe Cognitive Disabilities **Credits: 3**
EDEX 460 - Family Perspectives on Disability **Credits: 3**
MATH 320 - Mathematics for Early Childhood **Credits: 3**
MATH 330 - Teaching Mathematics in the Elementary School **Credits: 3**

Total Degree Requirements: 129.5

(1) A 3.0 cumulative GPA is required to register in the Teacher Certification Sequence courses.

(*) See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Minor

Deaf Studies Minor

A minor in Deaf Studies introduces the participant to essential information regarding hearing loss and deaf culture. In addition, basic sign language skills are developed. This course of study enables individuals to have a better understanding of the needs of persons who are deaf and hard-of-hearing and to communicate with individuals within the deaf community at a basic level.

The minor is an 18-credit program with 15 required and 3 elective credits. Required credits include the core courses that are essential to understanding the language and culture of the deaf community. The elective credits allow the minor candidate to select a more focused area of concentration.

Students must maintain a cumulative GPA of not less than 2.5 to enter and complete the minor. Except for the introductory courses, EDHL 114 and EDHL 115, only students who have officially declared a deaf studies minor will be able to schedule the designated courses. The grade received in American Sign Language courses must be a "C" or better to complete the minor.

This minor would be of interest to anthropology, criminology, education, nursing, psychology, disability services, and sociology majors and anyone else who is interested in interacting with persons who are deaf or hard-of hearing.

Required Courses: 15

EDHL 114 - Introduction to Deaf and Hard-of-Hearing Persons **Credits: 3**
EDHL 115 - Introduction to American Sign Language **Credits: 3**
EDHL 215 - Intermediate American Sign Language **Credits: 3**
EDHL 308 - Supporting Language and Communication for Deaf/Hard-of-Hearing, English Language Learners, and Individuals with Language Disorders **Credits: 3**
EDHL 317 - Sign Language in Educational Settings **Credits: 3**

Controlled Electives: 3

3 credits from the following:

EDEX 111 - Introduction to Exceptional Persons **Credits: 3**
EDHL 417 - Advanced American Sign Language **Credits: 3**

Total Minor Requirements: 18

Special Education Minor

Completion of the Special Education minor will prepare students to have a better understanding of the social, emotional, and learning characteristics of individuals with mental retardation, autism, developmental disabilities, learning disabilities, brain injuries, emotional and behavioral disorders, physical disabilities, and multiple disabilities.

In addition, students taking this minor will develop a thorough understanding of PL 105-17, Individuals with Disabilities Education Act (IDEA), which addresses the rights of individuals and parents regarding inclusion in the regular classroom, delivery of services in inclusive settings, and transition planning.

The Special Education minor is an 18-credit program with 3 required and 15 elective credits. The required credits are met through enrollment in EDEX 111. This course provides essential information regarding IDEA (PL 105-17) as well as an overview of the field of special education, thus allowing the minor candidate to select a more focused area of concentration.

This minor would be of interest to sociology, psychology, child development and family relations, criminology, and secondary education majors who are interested in interacting or working with individuals with disabilities. To be accepted into the minor, a student must have a minimum 2.5 cumulative GPA.

Required Course: 3

EDEX 111 - Introduction to Exceptional Persons **Credits: 3**

Controlled Electives: 15

Five courses from the following:

EDEX 340 - Introduction to Behavior Management in Special Education **Credits: 3**

EDEX 415 - Preschool Education for Children with Disabilities **Credits: 3**

EDEX 458 - Transition Assessment and Planning for Youth with Disabilities **Credits: 3**

EDEX 460 - Family Perspectives on Disability **Credits: 3**

EDEX 469 - Education of Persons with Emotional/Behavioral Disorders, Learning Disabilities or Brain Injury **Credits: 3**

EDEX 478 - Education of Persons with Mental Retardation/Developmental Disabilities and Physical/ Multiple Disabilities **Credits: 3**

Total Minor Requirements: 18

Certificate and Certification Programs

Behavior Analysis Certificate

Provides the student with the specific knowledge and skills necessary to function as a Board-Certified Assistant Behavior Analyst (BCaBA). Courses are aligned to the requirements of the Behavior Analyst Certification Board and satisfy one of the three requirements to be eligible to become a BCaBA.

Required Courses:

The two remaining requirements, supervised field experience and earning a passing score on the BCaBA examination, are not part of this undergraduate certificate.

EDEX 340 - Introduction to Behavior Management in Special Education **Credits: 3**

EDEX 435 - Methods and Curriculum—Severe Cognitive Disabilities **Credits: 3**
EDEX 440 - Ethical and Professional Behavior **Credits: 1**
EDEX 469 - Education of Persons with Emotional/Behavioral Disorders, Learning Disabilities or Brain Injury **Credits: 3**
EDEX 476 Foundations of Behavioral Analysis

Dual Certification Special Education Grades 7-12 for Secondary Education Majors

Students majoring in a secondary education field may complete academic requirements for certification in special education grades 7-12 by completing the following requirements. Students are advised that completion of requirements for a second certification may take up to three additional semesters.

Required Courses: 30

EDEX 111 - Introduction to Exceptional Persons **Credits: 3**
EDEX 221 - Methods of Teaching Mathematics to Secondary Students with Disabilities **Credits: 2**
EDEX 340 - Introduction to Behavior Management in Special Education **Credits: 3**
EDEX 435 - Methods and Curriculum—Severe Cognitive Disabilities **Credits: 3**
EDEX 440 - Ethical and Professional Behavior **Credits: 1**
EDEX 458 - Transition Assessment and Planning for Youth with Disabilities **Credits: 3**
EDEX 469 - Education of Persons with Emotional/Behavioral Disorders, Learning Disabilities or Brain Injury **Credits: 3**
EDEX 478 - Education of Persons with Mental Retardation/Developmental Disabilities and Physical/ Multiple Disabilities **Credits: 3**
EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1 (1)**
EDUC 421 - Student Teaching **Credits: 5-6 (2)**

Total Certificate Requirements: 30

(1) EDUC 342 could be taken in summer. Arrangements could be made to use ESY programs such as IUP, PACE, Sunrise School, Milestones, and/or a number of other programs near and far. In fact, a lot of this program could be easily integrated into the candidate's major program.

(2) A six-week placement under the supervision of a certified special education teacher. Arrangements for this experience will be made among the student-teaching coordinators of the student's major, special education, and the Teacher Education office.

Fifth Year Courses Reading Specialist

To receive a reading specialist certification, students must complete 27 credits within the master's program from categories A-C.

A. Literacy

LTCY 600 - Foundations of Literacy Instruction **Credits: 3**
LTCY 644 - Issues and Trends in the Language Arts **Credits: 3**
LTCY 701 - Assessment and Acceleration **Credits: 3**
LTCY 702 - Reading and Writing in the Content Areas **Credits: 3**
LTCY 705 - Organization and Administration of Reading/ Writing Programs **Credits: 3**
LTCY 770 - Practicum and Seminar for Reading Specialist I **Credits: 3**
LTCY 771 - Practicum and Seminar for Reading Specialist II **Credits: 3**

B. Diversity

LTCY 635 - Literacy in Inclusive Classrooms **Credits: 3**

C. Related Area

LTCY 607 - Instruction and Learning with Literature **Credits: 3**

Total Certificate Requirements: 27

Please see the *Graduate Catalog* at www.iup.edu/graduatestudies/catalog and look under Master's Degree Programs for specific courses.

Communications Media

Website: www.iup.edu/commmedia

B. Gail Wilson, Chair

The department offers a Bachelor of Science degree program in Communications Media, with three tracks as well as a minor in Communications Media. The Communications Media minor is an 18-credit program designed to complement any major.

Students majoring in Communications Media may select one of three tracks: **Media Marketing**, **Media Production**, or **Media Studies**.

Bachelor of Science

Media Marketing Track, Communications Media, BS

The **Media Marketing Track** encourages students to develop skills in media promotion, communication consulting, media sales, and media management. This track includes courses from the Department of Marketing. These required marketing courses introduce students to broader marketing concepts in skill-based marketing courses.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 6

COSC 101 - Computer Literacy **Credits: 3**

or

IFMG 101 - Computer Literacy **Credits: 3**

ECON 122 - Principles of Microeconomics **Credits: 3**

Major: 44

Required Courses:

COMM 101 - Introduction to Communications, Media, and Culture **Credits: 3**

COMM 150 - Media Aesthetics **Credits: 3**

COMM 395 - Career Planning in Communications Media **Credits: 1**
COMM 475 - Senior Portfolio Presentation **Credits: 1**
COMM 493 - Internship **Credits: 9** (summer only)

Media Production:

Minimum of two courses from the following:

COMM 207 - Online Media Production **Credits: 3**
COMM 240 - Communications Graphics **Credits: 3**
COMM 249 - Basic Audio Recording Techniques **Credits: 3**
COMM 251 - Television Production **Credits: 3**
COMM 271 - Beginning Photography **Credits: 3**
COMM 306 - 2-D Digital Game Development **Credits: 3**
COMM 340 - Advanced Communication Graphics **Credits: 3**
COMM 348 - Animation **Credits: 3**
COMM 349 - Radio Production **Credits: 3**
COMM 350 - Digital Storytelling **Credits: 3**
COMM 351 - Advanced Video Production **Credits: 3**
COMM 355 - Editing for Video and Film **Credits: 3**
COMM 360 - Digital Sports Production **Credits: 3**
COMM 371 - Advanced Photography **Credits: 3**
COMM 374 - Documentary Photography **Credits: 3**
COMM 406 - 3-D Game and Simulation Design and Development **Credits: 3**
COMM 407 - Television Feature Production **Credits: 3**
COMM 408 - Media Field Studies **Credits: 3**
COMM 440 - Multimedia Production **Credits: 3**
COMM 449 - Advanced Audio Recording Techniques **Credits: 3**
COMM 451 - Multimedia News Production **Credits: 3**
COMM 471 - Advanced Image Editing **Credits: 3**
COMM 474 - Commercial Photography **Credits: 3**

Media Marketing Courses: 12

COMM 205 - Making Presentations with Media **Credits: 3**
or
COMM 261 - Teamwork and Communication Skills for College and Career **Credits: 3**

COMM 401 - Media Programming and Promotion **Credits: 3**
COMM 470 - Media Management and Sales **Credits: 3**
COMM 477 - Freelancing and Entrepreneurship in Media **Credits: 3**

Controlled Electives:

Other COMM elective courses **Credits: 6**

Marketing Requirements: 12

MKTG 320 - Principles of Marketing **Credits: 3**
MKTG 433 - Advertising **Credits: 3**
MKTG 439 - Internet Marketing **Credits: 3**
MKTG 445 - Social Media Marketing **Credits: 3**

Other Requirements: 9

Additional courses outside Communications Media, advisor approval required.

Free Electives: 8-9

Total Degree Requirements: 120

Media Production Track, Communications Media, BS

Students who seek a more rigorous production experience will find that in the **Media Production Track**. In this track, students will take a set of five COMM production courses that will help them to acquire higher-level production skills. Students will learn the foundational skills associated with their chosen production area and learn to use contemporary post-production software and equipment. This more specialized track will prepare students for employment in various production fields, including video, audio, radio, graphics, photography and games.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 6

COSC 101 - Computer Literacy **Credits: 3**

or

IFMG 101 - Computer Literacy **Credits: 3**

no courses with COMM prefix

Major: 44

Required Courses:

COMM 101 - Introduction to Communications, Media, and Culture **Credits: 3**

COMM 150 - Media Aesthetics **Credits: 3**

COMM 395 - Career Planning in Communications Media **Credits: 1**

COMM 475 - Senior Portfolio Presentation **Credits: 1**

COMM 493 - Internship **Credits: 9** (summer only)

Writing-Intensive Course:

One writing-intensive COMM course **Credits: 3**

Basic Media Production:

(1)

Minimum of two courses from the following:

COMM 207 - Online Media Production **Credits: 3**
COMM 240 - Communications Graphics **Credits: 3**
COMM 249 - Basic Audio Recording Techniques **Credits: 3**
COMM 251 - Television Production **Credits: 3**
COMM 271 - Beginning Photography **Credits: 3**
COMM 306 - 2-D Digital Game Development **Credits: 3**
COMM 349 - Radio Production **Credits: 3**

Advanced Media Production: 9

Minimum of three courses from the following:

COMM 340 - Advanced Communication Graphics **Credits: 3**
COMM 348 - Animation **Credits: 3**
COMM 350 - Digital Storytelling **Credits: 3**
COMM 351 - Advanced Video Production **Credits: 3**
COMM 355 - Editing for Video and Film **Credits: 3**
COMM 360 - Digital Sports Production **Credits: 3**
COMM 371 - Advanced Photography **Credits: 3**
COMM 374 - Documentary Photography **Credits: 3**
COMM 406 - 3-D Game and Simulation Design and Development **Credits: 3**
COMM 407 - Television Feature Production **Credits: 3**
COMM 408 - Media Field Studies **Credits: 3**
COMM 440 - Multimedia Production **Credits: 3**
COMM 449 - Advanced Audio Recording Techniques **Credits: 3**
COMM 451 - Multimedia News Production **Credits: 3**
COMM 471 - Advanced Image Editing **Credits: 3**
COMM 474 - Commercial Photography **Credits: 3**

Controlled Electives: 9

Other COMM elective courses, NOT including production courses

Other Requirements: 21

For courses outside Communications Media, advisor approval required. A minor is strongly encouraged.

Free Electives: 8-9

Total Degree Requirements: 120

- (1) At least 12 COMM credits must be 300 level or higher.
- (2) At least 6cr (two courses) in production must be in the same production area.

Media Studies Track, Communications Media, BS

The **Media Studies Track** seeks to broadly educate students in communications media by encouraging them to develop their communication skills, written, oral, and visual. Courses include components to develop critical thinking, collaboration, and research skills. The flexibility of the program allows students to explore a range of courses in media theory, criticism, culture, and current media issues. Beginning level production courses introduce concepts of producing media messages.

With 21 credits of required out of department electives, Communications Media students in the Media Studies and Media Production Tracks are highly encouraged to pursue a minor in another program that complements their degree in Communications Media.

The department faculty offers a wide variety of experience in all areas of Communications Media. With the combination of classroom work and the required internship program, departmental graduates are competitive candidates for positions in various areas. Students graduating from this program have obtained positions in areas such as radio, television, cable television, public relations, advertising media, media relations, and corporate media relations.

Students changing majors from other academic departments within the university are required to be in academic good standing before the transfer will be approved.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 6

COSC 101 - Computer Literacy **Credits: 3**

or

IFMG 101 - Computer Literacy **Credits: 3**

No courses with COMM prefix

Major: 44

Required Courses:

COMM 101 - Introduction to Communications, Media, and Culture **Credits: 3**

COMM 150 - Media Aesthetics **Credits: 3**

COMM 395 - Career Planning in Communications Media **Credits: 1**

COMM 475 - Senior Portfolio Presentation **Credits: 1**

COMM 493 - Internship **Credits: 9** (summer only)

Writing-Intensive Course:

One writing-intensive COMM course **Credits: 3**

Media Studies: 12

(1)

Minimum of four courses from the following:

COMM 205 - Making Presentations with Media **Credits: 3**

COMM 206 - History and Theory of Making Games **Credits: 3**

COMM 230 - Global Media and Communication **Credits: 3**

COMM 261 - Teamwork and Communication Skills for College and Career **Credits: 3**

COMM 302 - Research in Communications Media **Credits: 3**

COMM 303 - Scriptwriting **Credits: 3**

COMM 315 - Persuasive Media Writing **Credits: 3**
COMM 325 - Gender in Media **Credits: 3**
COMM 335 - Communications Consulting and Project Management **Credits: 3**
COMM 345 - Television Criticism **Credits: 3**
COMM 354 - Media Law and Policy **Credits: 3**
COMM 375 - Mass Media and Behavior **Credits: 3**
COMM 380 - The History of African Americans in Film **Credits: 3**
COMM 401 - Media Programming and Promotion **Credits: 3**
COMM 403 - Multimedia News Writing **Credits: 3**
COMM 414 - Music, Media, and Culture **Credits: 3**
COMM 420 - Media Portrayal of Crime **Credits: 3**
COMM 445 - Cinematic Directors **Credits: 3**
COMM 460 - Disturbing Trends in Communication Technology **Credits: 3**
COMM 470 - Media Management and Sales **Credits: 3**
COMM 477 - Freelancing and Entrepreneurship in Media **Credits: 3**
COMM 480 - Seminar in Communications Media **Credits: 3**

Minimum of Two Production Courses from the Following: 6

COMM 207 - Online Media Production **Credits: 3**
COMM 240 - Communications Graphics **Credits: 3**
COMM 249 - Basic Audio Recording Techniques **Credits: 3**
COMM 251 - Television Production **Credits: 3**
COMM 271 - Beginning Photography **Credits: 3**
COMM 306 - 2-D Digital Game Development **Credits: 3**
COMM 348 - Animation **Credits: 3**
COMM 350 - Digital Storytelling **Credits: 3**
COMM 351 - Advanced Video Production **Credits: 3**
COMM 355 - Editing for Video and Film **Credits: 3**
COMM 360 - Digital Sports Production **Credits: 3**
COMM 371 - Advanced Photography **Credits: 3**
COMM 374 - Documentary Photography **Credits: 3**
COMM 406 - 3-D Game and Simulation Design and Development **Credits: 3**
COMM 407 - Television Feature Production **Credits: 3**
COMM 408 - Media Field Studies **Credits: 3**
COMM 440 - Multimedia Production **Credits: 3**
COMM 449 - Advanced Audio Recording Techniques **Credits: 3**
COMM 451 - Multimedia News Production **Credits: 3**
COMM 471 - Advanced Image Editing **Credits: 3**
COMM 474 - Commercial Photography **Credits: 3**

Controlled Electives: 6

Other COMM elective courses including courses from the above lists not taken as part of those requirements

Other Requirements: 21

Courses outside Communications Media that augment the student's major course of study (advisor approval).

Free Electives: 8-9

Total Degree Requirements: 120

(1) At least 12 COMM credits must be 300 level or higher.

Minor

Communications Media Minor

Required Courses:

COMM 101 - Introduction to Communications, Media, and Culture **Credits: 3**

COMM XXX - Electives in Communication Media **Credits: 15**

Total Minor Requirements: 18

Certificate and Certification Programs

Audio Production Certificate

Prepares students for careers producing, recording, mixing, and mastering audio. This 18-credit certificate requires students to take five 3-credit core courses and an additional 3 credits for electives. Completion of this certificate will help prepare students for positions in many fields including, radio, film and television in which knowledge of audio production techniques and technology is required. Majors from other departments will be able to declare a communications media minor along with receiving the certificate.

Core Courses: 15

COMM 101 - Introduction to Communications, Media, and Culture **Credits: 3**

COMM 249 - Basic Audio Recording Techniques **Credits: 3**

COMM 349 - Radio Production **Credits: 3**

COMM 350 - Digital Storytelling **Credits: 3**

COMM 449 - Advanced Audio Recording Techniques **Credits: 3**

Elective: 3

COMM 281 - Special Topics **Credits: 1-3 (1)**

COMM 354 - Media Law and Policy **Credits: 3**

COMM 390 - Practicum in Communications **Credits: 1-3 (1)**

COMM 401 - Media Programming and Promotion **Credits: 3**

COMM 403 - Multimedia News Writing **Credits: 3**

COMM 408 - Media Field Studies **Credits: 3**

COMM 414 - Music, Media, and Culture **Credits: 3**

COMM 451 - Multimedia News Production **Credits: 3**

COMM 470 - Media Management and Sales **Credits: 3**

COMM 477 - Freelancing and Entrepreneurship in Media **Credits: 3**

COMM 480 - Seminar in Communications Media **Credits: 3 (1)**

COMM 481 - Special Topics **Credits: 1-3**

Total Certificate Requirements: 18

(1) As appropriate depending on topic; approval required.

Photography and Digital Imaging Certificate

For students who wish to obtain inclusive training in digital photography, image optimization, and display. This 18-credit program certificate requires students to take five 3-credit core courses and an additional 3 credits of electives. Completion of the certificate will help prepare students for positions in many fields in which knowledge of photography and digital imaging is required. Majors from other departments will be able to declare a communications media minor along with receiving the certificate.

Core Courses: 15

COMM 101 - Introduction to Communications, Media, and Culture **Credits: 3**

COMM 271 - Beginning Photography **Credits: 3**

COMM 371 - Advanced Photography **Credits: 3**

COMM 374 - Documentary Photography **Credits: 3**

COMM 471 - Advanced Image Editing **Credits: 3**

Elective: 3

COMM 240 - Communications Graphics **Credits: 3**

COMM 251 - Television Production **Credits: 3**

COMM 390 - Practicum in Communications **Credits: 1-3 (1)**

COMM 408 - Media Field Studies **Credits: 3**

COMM 440 - Multimedia Production **Credits: 3**

COMM 474 - Commercial Photography **Credits: 3**

COMM 477 - Freelancing and Entrepreneurship in Media **Credits: 3**

COMM 481 - Special Topics **Credits: 1-3 (1)**

Total Certificate Requirements: 18

(1) As appropriate depending on topic: approval required.

Counseling

Website: www.iup.edu/counseling

Claire J. Dandeneau, Chair

This graduate department offers two master's degree programs. The 60-credit MA degree program in community counseling is designed to prepare students to work in a variety of settings including mental health centers, drug and alcohol treatment programs, specialized community agencies, vocational education or rehabilitation programs, correctional institutions, health care settings, social services, and business and industry. This program is also offered at the IUP Monroeville Graduate and Professional Center.

The MEd program in school counseling certification is designed to prepare elementary and secondary counselors to qualify for institutional and commonwealth certification. The 60-credit competency-based program includes a series of counseling skills courses to individual and group counseling and a field experience under the supervision of a certified school counselor. Those students already possessing a master's degree may apply to the Counseling program for "certification only" status. Refer to the *Graduate Catalog* for further details.

Developmental Studies

Website: www.iup.edu/devstudies

Melvin A. Jenkins, Chair

The Department of Developmental Studies is committed to helping underprepared students prepare, prepared students advance, and advanced students excel. With this motto as its mission, the department provides various academic support services to all IUP students.

The department offers a package of freshman seminar courses designed to prepare first-year students with the skills and knowledge important to college success. These three 1-credit courses count toward graduation and include DVST 150, DVST 160, DVST 170.

The department offers a precollege experience to all incoming first-year students called CUSP: The Early Entrance Experience. This program starts one week before fall classes and includes the course DVST 150 plus activities, workshops, and seminars to orient students to the higher education experience, to IUP in particular, and to the factors in student success.

In addition, the department offers courses that develop learning skills to enhance academic success. Courses in developmental mathematics and reading are offered for institutional credit. Institutional credit counts in determining full-time enrollment status but not in determining credits applicable for degree eligibility at graduation. DVST 110, a 2-credit course that can be used for undergraduate graduation credit, is often linked with another content course.

All students matriculating through the Department of Developmental Studies as department advisees receive a program of freshman-year courses, developmental advisement, and academic support services and are transferred to advisement in their college at the end of a successful freshman year.

The Center for Learning Enhancement

The department provides educational support services in the areas of reading, mathematics, biological and physical sciences, foreign languages, social sciences, study skills, and related areas. These services are provided by both professional and undergraduate paraprofessional staff. Students are encouraged to participate in a broad array of program services including one-to-one and group tutorials, workshops, and Supplemental Instruction sessions provided by a trained staff of undergraduate peer educators. These services focus on historically difficult academic courses and majors.

Act 101 Program

Students identified as eligible for Act 101 support receive the Department of Developmental Studies complete freshman program. The program, created as a result of the Pennsylvania Higher Education Equal Opportunity Act 101 in 1971 by the legislature of the commonwealth, focuses on servicing IUP students to make the ideal of equal educational opportunity a reality for all qualified students.

The department offers two Act 101 programs—one on the main campus and another at the Punxsutawney Regional Campus. The office is located in 202 Pratt Hall. Further information about the Department of Developmental Studies and the Act 101 program can be obtained by calling 724-357-2729 or at the website www.iup.edu/devstudies.

Associate of Arts

General Studies, AA

The associate of arts degree program with a major in general studies is designed to provide the student with a broad base of knowledge in liberal studies with a focused concentration in a field of study at IUP. The program is available in a format of either a traditional classroom or online instruction. The required concentration may include the already approved courses of an established minor program or a set of pre-approved courses to satisfy the 18-credit concentration. No more than 30 credits may be transferred into this degree program from other colleges or universities.

Students who may find this degree appropriate are those whose career goals only require an associate of arts degree, who are distance education students, who need a degree credential in route to a bachelor's degree, or who are unable to complete a bachelor's degree, but seek a degree that can accurately reflect their accomplishments in college.

Liberal Studies: 39-40

As outlined in the Liberal Studies Requirements with the following specifications:

Fine Arts: 3

Dimensions of Wellness/ROTC: 3

Humanities: 9

Learning Skills: 6

ENGL 101 - Composition I **Credits:** 3 or higher

MATH 101 - Foundations of Mathematics **Credits:** 3 or higher

Natural Science: 6-7

Social Science: 6

(1)

Liberal Studies Electives: 6

Concentration: 18

Completion of an approved minor or pre-approved set of courses

Free Electives: 2-3

Total Degree Requirements: 60

(1) A 3cr course in Global and Multicultural Awareness must be taken.

Bachelor of Arts

General Studies, BA

The bachelor of arts degree program in general studies is designed for adult learners with prior college experience but who lack a four-year degree. Under faculty advisement, the student will develop an individualized plan of study that does not duplicate any existing IUP major. The student's plan of study must be based on a specific theme that incorporates basic, applied, and professional course work within a theoretical framework. At the time of application for degree candidacy or transfer from another institution, a faculty member will be assigned to assist with the plan of study before acceptance.

Liberal Studies: 43

As outlined in the Liberal Studies Requirements with the following specifications:

College Concentration ("Theme"): 30

Complete all requirements for a recognized minor or a concentration approved by an advisor, plus additional courses offered within the same academic college (1). No less than 15 of these credits should be 300-level or above.

Special Interest Area ("Cognate Area"): 12

With approval of an advisor, the student will select additional courses that focus on a particular need, interest, or specialty that complements the college concentration.

Free Electives: 35

Total Degree Requirements: 120

A minimum of 42 credits of advanced course work is required for graduation in the program.

Individually planned themes may not duplicate any existing degree programs that are otherwise available at IUP, nor may they be used to circumvent specific requirements within an existing major.

(1) An advisor may provide pre-approval for course work outside of the college if it's closely related to the concentration. An example may be an HOSP course in an ECOBIT concentration or an IFMG course in a NSM college concentration.

Educational and School Psychology

Website: www.iup.edu/schoolpsychology

Lynanne Black, Chair

The department provides courses to undergraduate and graduate students.

Graduate Programs

Programs leading to the MEd degree in educational psychology as well as an Educational Specialist (EdS) and a PhD in school psychology are described in the *Graduate Catalog*.

Minor

Educational Psychology Minor

Undergraduate students may minor in educational psychology by applying application to the advisor of the minor program. Eighteen credits are required for the minor, take six of the following:

Required Courses

EDSP 102 - Educational Psychology **Credits: 3**

EDSP 373 - Psychology of Adolescent Education **Credits: 3**

EDSP 378 - Learning **Credits: 3**

EDSP 468 - Current Topics in Educational Psychology **Credits: 3**

EDSP 476 - Foundations of Behavior Analysis **Credits: 3**

EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**

EDSP 479 - Interpreting and Critiquing Educational Research **Credits: 3**

Total Minor Requirements: 18

Other Degrees

College of Education and Communications Honors Program

This track enables students to participate in advanced study in the areas of learning and instructional theory, motivation to learn, assessment of student learning, classroom management, and the psychology of adolescent education. The track utilizes course work currently in the Educational Psychology minor, which also carries honors courses designation. In addition, students complete an Honors Internship, EDSP 493. Students may complete the Educational Psychology minor while in the Honors Track if desired.

Honors course work is recorded on university transcripts, and students completing the Education Honors Track will be recognized at departmental commencement ceremonies.

Eligibility and Requirements: The Honors Track is open by permission to elementary and secondary education majors and educational psychology minors with a minimum 3.25 GPA in total university course work and a completed application. To apply, students should file an application with the chairperson of the Educational and School Psychology Department.

Students complete EDSP 102/H/ and EDSP 477/H/; two of the following electives: EDSP 373/H/, EDSP 476/H/, or EDSP 378/H/; and EDSP 493/H/ for a total of 13 credits. Students must earn at least a "B" in each course completed for the track to proceed and maintain a 3.25 cumulative GPA. To determine how Honors Track courses will be integrated into existing requirements for their major, students should consult their advisors.

Professional Studies in Education

Website: www.iup.edu/pse

DeAnna M. Laverick, Chair

Bachelor of Science in Education

Business Education, BSED

The program leads to the degree of Bachelor of Science in education and Pennsylvania teacher certification in business, computer, and information technology for grades PK-12. The Business Education program is dedicated to preparing teachers who will be qualified and certified to instruct students to live and work in a business environment. The program is intended for those interested in teaching in public elementary, junior/middle, and senior high schools, vocational-technical schools, private business schools, or industry.

Admission to this program requires entering students to meet the guidelines for admission to the College of Education and Communications. Additionally, students must achieve a 3.0 GPA to apply for Step 1 of the Teacher Education process to enroll in major courses, to student teach, and to be recommended for certification. Students must meet the requirements leading to teacher certification as outlined in this catalog.

Before graduation, each business education student must document completion of 500 hours of business work-related experience. This experience can be acquired during summer vacations and vacations and in offices on the campus during the regular school term. Previous documented experience may also be counted.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities:

HIST 196 - Explorations in US History **Credits: 3**

Mathematics:

MATH 151 - Elements of Mathematics I **Credits: 3**

Natural Science:

Option I recommended

Social Science:

ECON 121 - Principles of Macroeconomics **Credits: 3**
PSYC 101 - General Psychology **Credits: 3**

Dimensions of Wellness:

FIN 143 - Financial Wellness **Credits: 3**

Liberal Studies Electives: 3

ECON 122 - Principles of Microeconomics **Credits: 3**

College: 33

Preprofessional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits: 3**
EDSP 102 - Educational Psychology **Credits: 3**

Professional Education Sequence:

EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**
EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**
EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**
EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits: 2**
EDEX 323 - Instruction of English Language Learners with Special Needs **Credits: 2**
EDUC 441 - Student Teaching **Credits: 5-12**
EDUC 442 - School Law **Credits: 1**
EDUC 499 - Multicultural/Multiethnic Education **Credits: 2**
MIDL 321 - 21st-Century Literacies for Diverse Learners **Credits: 3**

Major: 42

Required Courses:

Business Administration Core: 27

ACCT 201 - Accounting Principles I **Credits: 3**
BCOM 321 - Business and Interpersonal Communications **Credits: 3**
BLAW 235 - Legal Environment of Business **Credits: 3**
COMM 101 - Introduction to Communications, Media, and Culture **Credits: 3**
COSC 110 - Problem Solving and Structured Programming **Credits: 3**
FIN 310 - Fundamentals of Finance **Credits: 3**
MGMT 310 - Principles of Management **Credits: 3**
MKTG 320 - Principles of Marketing **Credits: 3**

Business, Computer, and Information Technology Certification: 15

BTED 411 - Methods in Business and Information Technology I **Credits: 3**
BTED 412 - Methods in Business and Information Technology II **Credits: 3**

COMM 440 - Multimedia Production **Credits:** 3
ETIT 330 - Technology in the Classroom **Credits:** 3
MGMT 105 - Introduction to Business **Credits:** 3

Free Electives: 1

Total Degree Requirements: 120

See advisory paragraph "Timely Completion of Degree Requirements" in the section on Requirements for Graduation.

(*) See requirements leading to teacher certification, titled "Admission to Teacher Education," in the College of Education and Communications section of this catalog.

(1) Students can transfer credit from another regionally accredited institution.

Early Childhood, BSED/Literacy, MEd

This program, which emphasizes early childhood education and literacy, is designed to assist undergraduate students in becoming highly competent and effective teachers of children in PreK through Grade 4. As undergraduates, students in this program meet the academic requirements for certification in Early Childhood Education and earn a bachelor of science in education degree. Students enrolled in this program have the opportunity to apply for Early Admission to the School of Graduate Studies and Research and begin taking graduate courses that apply toward the MEd—Literacy program.

Upon successful completion of the required graduate course work, candidates become certified as Reading Specialists in PreK through Grade 12 and earn a master of education degree with a major in Literacy. This program prepares students to become professional educators who are well-qualified to utilize appropriate techniques and strategies to expand children's cognitive, language, social, emotional, and physical development. During the semester in which they surpass 90 credits, students follow the School of Graduate Studies and Research Early Admission Policy and apply for early admittance to the MEd—Literacy/Reading Specialist program at IUP. A minimum 3.25 GPA is required to apply for early admittance to the graduate program. Once accepted for early admission to this program, students begin taking graduate courses in Literacy to work toward earning Reading Specialist Certification and a master of education degree with a major in Literacy.

Acceptance into the graduate program is contingent upon the student maintaining and graduating with a 3.0 minimum GPA. Students who are accepted for early admission into the MEd—Literacy program take the following courses as undergraduates, as long as they continue to have at least 90 credits and a minimum 3.0 GPA:

LTCY 635 Literacy in Inclusive Classrooms (in place of EDEX 323); LTCY 644 Issues and Trends in the Language Arts (in place of ECED 425); and LTCY 701 Assessment and Acceleration (in place of CDFR 310). A minimum 3.0 GPA is required to apply for teacher certification, to take major courses in the department, student teach, graduate with the BSEd degree, and be accepted into the MEd—Literacy program.

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 43.5

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities:

HIST 196 - Explorations in US History **Credits:** 3

Mathematics:

MATH 151 - Elements of Mathematics I **Credits:** 3

Natural Science:

3 of 4 required

- SCI 101 - Fundamentals of Physics **Credits: 2.5**
- SCI 102 - Fundamentals of Chemistry **Credits: 2.5**
- SCI 103 - Fundamentals of Earth and Space Science **Credits: 2.5**
- SCI 104 - Fundamentals of Environmental Biology **Credits: 2.5**

Social Science:

- GEOG 101 - Environment and Society **Credits: 3**

- GEOG 102 - Geography of the United States and Canada **Credits: 3**
or
- GEOG 104 - World Geography: Global Context **Credits: 3**

- PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 3

- MATH 152 - Elements of Mathematics II **Credits: 3**

College: 21-24

Preprofessional Education Sequence:

- ACE 103 - Digital Instructional Technology **Credits: 3**
- EDSP 102 - Educational Psychology **Credits: 3**

Professional Education Sequence:

- EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**
- EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**
- EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**
- EDUC 441 - Student Teaching **Credits: 5-12**
(1)
- EDUC 442 - School Law **Credits: 1**

Major: 52.5

Required Courses:

(2, 3)

- CDFR 310 - Child Observation and Assessment **Credits: 3**
(4,5)
- ECED 112 - Childhood Development Birth–Age 5 **Credits: 3**
- ECED 200 - Introduction to Early Childhood Education **Credits: 3**
- ECED 215 - The Developing Child: K-4th Grade **Credits: 3**
- ECED 250 - Language Development **Credits: 3**
- ECED 280 - Maximizing Learning: Engaging All PreK to Grade 4 Learners **Credits: 3**

ECED 310 - Science, Health, and Safety for All PreK to Grade 4 Learners **Credits: 3**
ECED 351 - Literacy for the Emergent Reader: PreK to Grade 1 Learners **Credits: 3**
ECED 411 - Social Studies for All PreK to Grade 4 Learners **Credits: 3**
ECED 425 - Methods of Teaching and Assessing Language Arts: Pre-K to Grade 4 Learners 2.5c-0l-2.5cr **Credits: 2.5**
(5)
ECED 451 - Literacy for the Developing Reader: Grades 2-4 Learners **Credits: 3**
ECED 499 - Advocacy and Collaboration in Diverse Families and Communities **Credits: 3**
ECSP 314 - Creative Experiences and Play for All PreK to Grade 4 Learners **Credits: 3**
EDEX 111 - Introduction to Exceptional Persons **Credits: 3**
EDEX 269 - Identifying and Understanding Children with Academic and Social Learning Needs from Preschool through Adolescence **Credits: 3**
EDEX 323 - Instruction of English Language Learners with Special Needs **Credits: 2**
(5)
MATH 320 - Mathematics for Early Childhood **Credits: 3**
MATH 330 - Teaching Mathematics in the Elementary School **Credits: 3**

Free Electives: 0-3

Total Degree Requirements: 120

- (1) Students who are seeking a BEd degree only (e.g., not early admitted to the MEd—Literacy program) will take 12cr of student teaching. Students who are admitted early to the MEd—Literacy program will take 9cr of student teaching and LTCY 701 for a total of 12cr.
- (2) A 3.0 cumulative GPA is required to apply for teacher certification, register for major courses, and student teach.
- (3) In the semester in which students earn 90+ credits, they may apply to the School of Graduate Studies and Research for Early Admittance to the MEd—Literacy/Reading Specialist Program. Students must have a minimum 3.25 GPA to apply. Students must follow the Early Admission to Graduate Program Policy. Students who are accepted will automatically become graduate students at IUP upon degree completion with a minimum 3.0 GPA, and fulfillment of criteria outlined in IUP's Early Admission to Graduate Program Policy.
- (4) Students must have a grade of "C" or better in PSYC 101 and CDFR 218 or a grade of "C" or better in PSYC 101 and ECED 112 to register for this course.
- (5) Students who are accepted for early admission to the MEd—Literacy program take the graduate course outlined in the program's catalog description rather than the undergraduate course listed.

Early Childhood/Special Education, BSED

This Early Childhood Education/Special Education (ECSP) program is designed to assist students in becoming highly qualified, competent, and effective teachers of all learners in grades PreK through 4. The program has an emphasis on best practices in both early childhood education and special education. Students in this program will meet the academic requirements for Pennsylvania certification in PreK to grade 4, as well as special education PreK to grade 8.

This program, combining course work in both early childhood education and special education with extensive field experiences, prepares students to be professional educators who are well qualified to utilize appropriate techniques and strategies to expand all children's cognitive, social, emotional, and physical development. Field experiences will take place in a variety of settings encompassing diverse learning needs as well as learners in birth to grade 3 classrooms, preschool classrooms, K-1 classrooms, and classrooms in grades 2-4.

Admission to this program requires entering students to meet the guidelines for admission to the College of Education and Communications. Additionally, students must achieve a 3.0 GPA to apply for Step 1 of the Teacher Education process to enroll in major courses, to student teach, and to be recommended for certification. Students must meet the requirements leading to teacher certification as outlined in this catalog.

Liberal Studies: 43.5

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities:

HIST 196 - Explorations in US History **Credits: 3**

Mathematics:

MATH 151 - Elements of Mathematics I **Credits: 3**

Natural Science:

(3 of 4 required)

SCI 101 - Fundamentals of Physics **Credits: 2.5**

SCI 102 - Fundamentals of Chemistry **Credits: 2.5**

SCI 103 - Fundamentals of Earth and Space Science **Credits: 2.5**

SCI 104 - Fundamentals of Environmental Biology **Credits: 2.5**

Social Science:

GEOG 101 - Environment and Society **Credits: 3**

GEOG 102 - Geography of the United States and Canada **Credits: 3**

or

GEOG 104 - World Geography: Global Context **Credits: 3**

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Elective: 3

MATH 152 - Elements of Mathematics II **Credits: 3**

College: 25

Preprofessional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits: 3**

or

EDEX 103 - Special Education Technology **Credits: 3**

EDSP 102 - Educational Psychology **Credits: 3**

Professional Education Sequence:

EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**

EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**

EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**

EDUC 442 - School Law **Credits: 1**

EDUC 461 - Student Teaching **Credits: 6**

EDUC 471 - Student Teaching **Credits: 6**

Major: 61

Required Courses:

- (1)
- ECED 117 - Family, Community, and School Relationships in a Diverse Society **Credits: 2**
 - ECED 200 - Introduction to Early Childhood Education **Credits: 3**
 - ECED 221 - Literature for the Young Child and Adolescent **Credits: 3**
 - ECED 250 - Language Development **Credits: 3**
 - ECED 280 - Maximizing Learning: Engaging All PreK to Grade 4 Learners **Credits: 3**
 - ECED 310 - Science, Health, and Safety for All PreK to Grade 4 Learners **Credits: 3**
 - ECED 351 - Literacy for the Emergent Reader: PreK to Grade 1 Learners **Credits: 3**
 - ECED 411 - Social Studies for All PreK to Grade 4 Learners **Credits: 3**
 - ECED 451 - Literacy for the Developing Reader: Grades 2-4 Learners **Credits: 3**
 - ECSP 112 - Growth and Development: Typical and Atypical **Credits: 3**
 - ECSP 314 - Creative Experiences and Play for All PreK to Grade 4 Learners **Credits: 3**
 - ECSP 340 - Introduction to Classroom and Behavior Management **Credits: 3**
 - EDEX 110 - Introduction to Special Needs PreK to Grade 8 **Credits: 3**
 - EDEX 269 - Identifying and Understanding Children with Academic and Social Learning Needs from Preschool through Adolescence **Credits: 3**
 - EDEX 278 - Identifying and Understanding Children with Significant Adaptive Behavior and Learning Needs from Birth through Adolescence **Credits: 3**
 - EDEX 323 - Instruction of English Language Learners with Special Needs **Credits: 2**
 - EDEX 424 - Strategic Assessment and Instruction in Expository Texts **Credits: 3**
 - EDEX 435 - Methods and Curriculum—Severe Cognitive Disabilities **Credits: 3**
 - EDEX 460 - Family Perspectives on Disability **Credits: 3**
 - MATH 320 - Mathematics for Early Childhood **Credits: 3**
 - MATH 330 - Teaching Mathematics in the Elementary School **Credits: 3**

Total Degree Requirements: 129.5

(1) A 3.0 cumulative GPA is required to register in the Teacher Certification Sequence courses.

(*) See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

English/Language Arts Specialization, Middle-Level Education Grades 4-8, BSED

The Middle-Level Education program prepares undergraduate students to become highly qualified, effective teachers in upper elementary grades 4-6 and in middle schools in grades 7-8. The content and methods courses in this program focus on the developmental and learning characteristics of students in this age group. Pedagogy courses present research-based strategies for engaging students in mathematics, science, social studies, and language arts content. Each student focuses on one of these content areas for building a solid, content-rich background to become certified as a middle-level educator in grades 4-8. The **English/Language Arts Specialization** is designed to prepare preservice teachers to meet the demands of teaching all academic subjects at the middle level in grades 4-8 with a specialization in English/language arts education. The **Social Studies Specialization** prepares preservice teachers to meet the demands of teaching all academic subjects at the middle level in grades 4-8 with a social studies focus.

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities:

HIST 196 - Explorations in US History **Credits: 3**

ENGL 122 - Introduction to English Studies **Credits: 3**

Mathematics:

MATH 151 - Elements of Mathematics I **Credits: 3**

Natural Science:

BIOL 103 - Life on Earth **Credits: 4**

or

BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**

or

BIOL 106 - Human Genetics and Health **Credits: 3**

SCI 105 - Physical Science I **Credits: 4**

Social Science:

ECON 101 - Basic Economics **Credits: 3**

or

ECON 121 - Principles of Macroeconomics **Credits: 3**

GEOG 101 - Environment and Society **Credits: 3**

GEOG 102 - Geography of the United States and Canada **Credits: 3**

or

GEOG 104 - World Geography: Global Context **Credits: 3**

PLSC 101 - World Politics **Credits: 3**

or

PLSC 111 - American Government **Credits: 3**

Liberal Studies Elective: 3

MATH 152 - Elements of Mathematics II **Credits: 3**

College: 28

Preprofessional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits: 3**

EDSP 102 - Educational Psychology **Credits: 3**

Professional Education Sequence:

EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits: 2**

EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**

EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**

EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**

EDUC 421 - Student Teaching **Credits: 5-6**

EDUC 440 - Professional Seminar: Teacher as Leader and Researcher Grades 4-8 **Credits: 2**

EDUC 441 - Student Teaching **Credits: 5-12**

EDUC 442 - School Law **Credits: 1**

EDUC 499 - Multicultural/Multiethnic Education **Credits: 2**

Major: 31

Required Middle-Level Courses:

GEOS 101 - The Dynamic Earth **Credits: 3 (2)**
GEOS 102 - The Dynamic Earth Lab **Credits: 1**
MATH 317 - Probability and Statistics for Mathematics Instruction **Credits: 3**
MATH 413 - Methods for Teaching Mathematics **Credits: 3**
MIDL 221 - Literature for Middle Level **Credits: 3**
MIDL 222 - Reading Instruction and Assessment in Grades 4-8 **Credits: 3**
MIDL 310 - Instructional Theory and Planning for the Middle Level **Credits: 3**
MIDL 311 - Social Studies Instruction and Assessment in Grades 4-8 **Credits: 3**
MIDL 312 - Science Instruction and Assessment in Grades 4-8 **Credits: 3**
MIDL 315 - Classroom Management and Adolescent Development **Credits: 3**
MIDL 425 - Methods of Teaching Language Arts in Grades 4-8 **Credits: 3**

English/Language Arts Distribution Requirements: 18

ENGL 314 - Speech and Communication in the Secondary English Classroom **Credits: 3**
ENGL 324 - Teaching and Evaluating Writing **Credits: 3**
ENGL 415 - English Language Studies for Teachers **Credits: 3**
MIDL 321 - 21st-Century Literacies for Diverse Learners **Credits: 3**
MIDL 422 - Diagnostic and Remedial Reading **Credits: 3**

Total Degree Requirements: 123

- (1) A 3.0 cumulative GPA is required to register for the Teacher Certification Sequence courses.
- (2) The course meets the PDE requirement of 4cr in geoscience for Middle- Level Education Grades 4-8 certification.

Science Specialization, Middle-Level Education Grades 4-8, BSED

The Middle-Level Education program prepares undergraduate students to become highly qualified, effective teachers in upper elementary grades 4-6 and in middle schools in grades 7-8. The content and methods courses in this program focus on the developmental and learning characteristics of students in this age group. Pedagogy courses present research-based strategies for engaging students in mathematics, science, social studies, and language arts content. Each student focuses on one of these content areas for building a solid, content-rich background to become certified as a middle-level educator in grades 4-8. The **English/Language Arts Specialization** is designed to prepare preservice teachers to meet the demands of teaching all academic subjects at the middle level in grades 4-8 with a specialization in English/language arts education. The **Social Studies Specialization** prepares preservice teachers to meet the demands of teaching all academic subjects at the middle level in grades 4-8 with a social studies focus. The **Science Specialization** prepares preservice teachers to meet the demands of teaching all academic subjects at the middle level in grades 4-8 with a science focus. The **Mathematics Specialization** prepares preservice teachers to meet the demands of teaching all academic subjects at the middle level in grades 4-8 with a mathematics focus.

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities-History:

HIST 196 - Explorations in US History **Credits: 3**

Mathematics:

MATH 151 - Elements of Mathematics I **Credits: 3**

Natural Science:

BIOL 103 - Life on Earth **Credits: 4**

or

BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**

or

BIOL 106 - Human Genetics and Health **Credits: 3**

SCI 105 - Physical Science I **Credits: 4**

Social Science:

GEOG 101 - Environment and Society **Credits: 3**

GEOG 102 - Geography of the United States and Canada **Credits: 3**

or

GEOG 104 - World Geography: Global Context **Credits: 3**

ECON 101 - Basic Economics **Credits: 3**

or

ECON 121 - Principles of Macroeconomics **Credits: 3**

PLSC 101 - World Politics **Credits: 3**

or

PLSC 111 - American Government **Credits: 3**

Liberal Studies Elective: 3

MATH 152 - Elements of Mathematics II **Credits: 3**

College: 28

Preprofessional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits: 3**

EDSP 102 - Educational Psychology **Credits: 3**

Professional Education Sequence:

EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits: 2**

EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**

EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**

EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**

EDUC 421 - Student Teaching **Credits: 5-6**

EDUC 440 - Professional Seminar: Teacher as Leader and Researcher Grades 4-8 **Credits: 2**

EDUC 441 - Student Teaching **Credits: 5-12**

EDUC 442 - School Law **Credits: 1**

EDUC 499 - Multicultural/Multiethnic Education **Credits: 2**

Major: 31

Required Middle-Level Courses:

GEOS 101 - The Dynamic Earth **Credits:** 3
GEOS 102 - The Dynamic Earth Lab **Credits:** 1
MATH 317 - Probability and Statistics for Mathematics Instruction **Credits:** 3
MATH 413 - Methods for Teaching Mathematics **Credits:** 3
MIDL 221 - Literature for Middle Level **Credits:** 3
MIDL 222 - Reading Instruction and Assessment in Grades 4-8 **Credits:** 3
MIDL 310 - Instructional Theory and Planning for the Middle Level **Credits:** 3
MIDL 311 - Social Studies Instruction and Assessment in Grades 4-8 **Credits:** 3
MIDL 312 - Science Instruction and Assessment in Grades 4-8 **Credits:** 3
MIDL 315 - Classroom Management and Adolescent Development **Credits:** 3
MIDL 425 - Methods of Teaching Language Arts in Grades 4-8 **Credits:** 3

Science Distribution Requirements: 18

BIOL 113
BIOL 114

BIOL 115 - Biotic Diversity of North America **Credits:** 3
or
BIOL 119 - Emerging Diseases **Credits:** 3
CHEM 101 - College Chemistry I **Credits:** 4
CHEM 102 - College Chemistry II **Credits:** 4
GEOS 150 - Geology of National Parks **Credits:** 3
or
GEOS 151 - The Age of Dinosaurs **Credits:** 3
PHYS 151 - Medical Physics Lecture **Credits:** 3
PHYS 161 - Medical Physics Lab **Credits:** 1

Total Degree Requirements: 121

Social Studies Specialization, Middle-Level Education Grades 4-8, BSED

The Middle-Level Education program prepares undergraduate students to become highly qualified, effective teachers in upper elementary grades 4-6 and in middle schools in grades 7-8. The content and methods courses in this program focus on the developmental and learning characteristics of students in this age group. Pedagogy courses present research-based strategies for engaging students in mathematics, science, social studies, and language arts content. Each student focuses on one of these content areas for building a solid, content-rich background to become certified as a middle-level educator in grades 4-8. The **English/Language Arts Specialization** is designed to prepare preservice teachers to meet the demands of teaching all academic subjects at the middle level in grades 4-8 with a specialization in English/language arts education. The **Social Studies Specialization** prepares preservice teachers to meet the demands of teaching all academic subjects at the middle level in grades 4-8 with a social studies focus.

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities-History:

HIST 196 - Explorations in US History **Credits:** 3

Mathematics:

MATH 151 - Elements of Mathematics I **Credits: 3**

Natural Science:

BIOL 103 - Life on Earth **Credits: 4**

or

BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**

or

BIOL 106 - Human Genetics and Health **Credits: 3**

SCI 105 - Physical Science I **Credits: 4**

Social Science:

GEOG 101 - Environment and Society **Credits: 3**

GEOG 102 - Geography of the United States and Canada **Credits: 3**

or

GEOG 104 - World Geography: Global Context **Credits: 3**

ECON 101 - Basic Economics **Credits: 3**

or

ECON 121 - Principles of Macroeconomics **Credits: 3**

PLSC 101 - World Politics **Credits: 3**

or

PLSC 111 - American Government **Credits: 3**

Liberal Studies Elective: 3

MATH 152 - Elements of Mathematics II **Credits: 3**

College: 28

Pre-professional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits: 3**

EDSP 102 - Educational Psychology **Credits: 3**

Professional Education Sequence:

EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits: 2**

EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**

EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**

EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**

EDUC 421 - Student Teaching **Credits: 5-6**

EDUC 440 - Professional Seminar: Teacher as Leader and Researcher Grades 4-8 **Credits: 2**

EDUC 441 - Student Teaching **Credits: 5-12**

EDUC 442 - School Law **Credits: 1**

EDUC 499 - Multicultural/Multiethnic Education **Credits: 2**

Major: 31

Required Middle-Level Courses:

GEOS 101 - The Dynamic Earth **Credits:** 3
GEOS 102 - The Dynamic Earth Lab **Credits:** 1
MATH 317 - Probability and Statistics for Mathematics Instruction **Credits:** 3
MATH 413 - Methods for Teaching Mathematics **Credits:** 3
MIDL 221 - Literature for Middle Level **Credits:** 3
MIDL 222 - Reading Instruction and Assessment in Grades 4-8 **Credits:** 3
MIDL 310 - Instructional Theory and Planning for the Middle Level **Credits:** 3
MIDL 311 - Social Studies Instruction and Assessment in Grades 4-8 **Credits:** 3
MIDL 312 - Science Instruction and Assessment in Grades 4-8 **Credits:** 3
MIDL 315 - Classroom Management and Adolescent Development **Credits:** 3
MIDL 425 - Methods of Teaching Language Arts in Grades 4-8 **Credits:** 3

Social Studies Distribution Requirements: 18

GEOG 230 - Cultural Geography **Credits:** 3
HIST 201 - Western Civilization before 1600 **Credits:** 3
HIST 202 - Western Civilization since 1600 **Credits:** 3
HIST 204 - United States History to 1877 **Credits:** 3
HIST 205 - United States History since 1877 **Credits:** 3
SOC 231 - Contemporary Social Problems **Credits:** 3

Total Degree Requirements: 121

Minor

Educational Technology Minor

The department of Professional Studies in Education offers a minor in Educational Technology. The Educational Technology minor is an 18-credit program designed for students who are completing a teaching degree in any discipline.

NOTE: No more than two classes in a student's core program can be utilized towards credits in a minor.

Required Courses:

ACE 103 - Digital Instructional Technology **Credits:** 3
BTED 412 - Methods in Business and Information Technology II **Credits:** 3
ETIT 330 - Technology in the Classroom **Credits:** 3
MIDL 321 - 21st-Century Literacies for Diverse Learners **Credits:** 3

Total Minor Requirements: 18

Electives:

Two classes from:

COMM 101 - Introduction to Communications, Media, and Culture **Credits:** 3
COMM 240 - Communications Graphics **Credits:** 3
COMM 249 - Basic Audio Recording Techniques **Credits:** 3
COMM 271 - Beginning Photography **Credits:** 3
COSC 110 - Problem Solving and Structured Programming **Credits:** 3

Certificate and Certification Programs

Urban Education Certificate

The 15-18 credit certificate in urban education prepares education majors for teaching in urban school districts, especially in low-income communities with high-minority enrollments, where the need for high-quality teachers is great. Coursework and field experiences emphasize the historical, economic, political, and socioeconomic contexts of urban schools and seek to develop within future teachers the skills, knowledge base, and dispositions for working with students whose backgrounds and life experiences may differ from their own.

Required Courses:

(1,2,3)

EDUC 342 - Pre-student Teaching Clinical Experience II **Credits:** 1

(1)

EDUC 441 - Student Teaching **Credits:** 5-12

or

EDUC 421 - Student Teaching **Credits:** 5-6

FDED 440 - Orientation to Teaching in Urban Centers **Credits:** 2

FDED 441 - Field Experiences in Urban Education **Credits:** 3

(2)

Total Certificate Requirements:15-18

(1) Field experience portion of this course must be completed in an urban setting.

(2) This course may replace EDUC 242 in some education programs. Others may substitute this for the field experience portion of EDUC 242.

(3) Student teaching must be completed in an urban setting. The number of student teaching credits and the course numbers vary in accordance to the requirements of the major.

Student Affairs in Higher Education

Website: www.iup.edu/sahe

John A. Mueller, Chair

The department offers a master of arts degree in student affairs in higher education. Students in this program prepare to be professional practitioners in two- and four-year colleges and universities in a variety of administrative areas, i.e., admissions, housing and residential life, student development programs, student activities and organizations, Greek affairs, registration, financial aid, career planning and development, minority affairs, health services, athletics, advising and testing, international student services, and counseling programs. Please refer to the *Graduate Catalog* for further details.

Other Programs

Other Degrees

College of Education and Communications Honors Program

The Honors Track enables students to participate in advanced study in the areas of learning and instructional theory, motivation to learn, assessment of student learning, classroom management, and the psychology of adolescent education. The Honors Track is encouraged for exceptional students in all fields of education. Honors course work is recorded on university transcripts, and students completing the Education Honors Track will be recognized at departmental commencement ceremonies.

Eligibility and Requirements: This track is open by permission to all education majors. To apply, an application should be filed with the Educational and School Psychology Department chairperson. Students may apply upon acceptance to IUP, or current students may make application following completion of one semester of course work. Applicants must have a minimum 3.25 GPA in total university or high school course work to apply. Students accepted before taking EDSP 102 complete EDSP 102/H/; EDSP 477/H/; EDSP 373/H/, EDSP 378/H/; and EDSP 493/H/. Students accepted following completion of a nonhonors section of EDSP 102 will be required to take all three of the courses offered (EDSP 373/H/ and EDSP 378 /H/) in addition to EDSP 477/H/ and the Honors Internship. Students must earn at least a B in each course completed for the track to proceed and must maintain a 3.25 cumulative GPA. To determine how Honors Track courses will be integrated into existing requirements for their major, students should consult their advisors.

Required Courses:

EDSP 102 - Educational Psychology **Credits:** 3 (Honors)
EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits:** 3 (Honors)
EDSP 493 - Educational Psychology Honors Internship **Credits:** 1 (Honors)
EDSP 373 - Psychology of Adolescent Education **Credits:** 3 (Honors)
EDSP 378 - Learning **Credits:** 3 (Honors)

Total Honors Requirement: 13

College of Fine Arts

Curtis A. Scheib, Dean

David A. Ferguson, Assistant Dean

Website: www.iup.edu/finearts

The College of Fine Arts has professional degree programs in art, music, theatre and dance, and interdisciplinary fine arts and awards the bachelor of arts and the bachelor of fine arts degrees. Programs leading to certification to teach art and music are offered in cooperation with the College of Education and Communications. This partnership leads to the bachelor of science in education degree. The college also offers minors in art, music, theatre, and dance.

With one of the largest arts programs in the commonwealth, IUP's College of Fine Arts offers dedicated facilities for each department, augmented by a 1,600-seat auditorium, two theaters, three art galleries, a university museum, a recital hall, computer laboratories, and a state-of-the-art dance studio. In fall 2005, a large, renovated teaching location for sculpture and clay opened for art students, and in spring 2006, a newly renovated and beautifully enlarged music building opened for music students and faculty. The music facility is one of the best university music teaching facilities in Pennsylvania, while the new location for sculpture and clay offers large open space, providing students the opportunity to increase their undergraduate art experience. The college sponsors 200 to 300 arts events annually, and its students, who currently enjoy the strongest academic profile of any of the university's colleges, have opportunities to develop their talents locally, regionally, and nationally. The college has an active international program for student exchange with a long-established, field-based program.

There are no additional college requirements for graduation beyond the university and departmental requirements listed in other sections of this catalog. Students in teaching certification programs in art and music also need to be aware of commonwealth and IUP requirements that may be found through the College of Education and Communications.

Mission Statement

The mission of the College of Fine Arts at IUP is to provide excellent programs of study for all of its majors, balancing high professional standards with rigorous and current educational practice, and to provide course work and programs of an equally high standard in service to majors in other departments that may require arts classes and, as part of the university's general studies mandate, to the entire university student body.

The college takes as its special mission the presentation of arts events including plays, concerts, exhibitions, and recitals, featuring the work of students and faculty as well as the work of visiting arts professionals, as a gift of enrichment and as a celebration of the human spirit for the university, the community, and the region.

Finally, the college takes as its mandate and its privilege the inclusion in its presentations, studios, and classrooms the works, thoughts, and performances of a culturally and ethnically diverse world of art.

College Majors

Art (History or Studio Track)—BA

Art Education—BSEd

Art Studio—BFA

Interdisciplinary Fine Arts (Dance Arts Track)—BA

Music—BA

Music Education—BSEd

Music Performance—BFA

Theatre (Musical Theatre Track available)—BA

College Minors

Art History

Art Studio

Dance

Entrepreneurship for Fine Arts

Music

Theatre

Interdisciplinary Programs, Minors and Certificates

The interdisciplinary degree programs, minors, and certificates are multidisciplinary and are not specific to one university college. Visit [Interdisciplinary Programs](#) to view offerings and requirements

Art and Design

Website: www.iup.edu/art

Tony DiMauro, Chair

The Department of Art and Design provides a sequence of foundation and advanced-level courses directed toward the development of the student's creative and expressive abilities. Degree programs offered are the bachelor of fine arts degree program in studio, bachelor of arts degree program in art/studio, bachelor of arts degree program in art/history, and bachelor of science in education degree program in art education. Minors in the department include art studio and art/history.

Students pursuing studio or art education degrees are initially admitted into the department through the Entrance Portfolio Review. Art history majors are not required to submit a portfolio.

The bachelor of fine arts degree program in studio prepares students for careers as professional visual artists, graphic designers, and creative practitioners and is a platform from which to go on to study for the master of arts and the master of fine arts degrees. The BFA degree program offers two tracks: Graphic Design and Art Studio. Students pursuing the Graphic Design Track will study a broad range of topics including web design, publication design, interactive design, animation, and corporate identity. Faculty mentors assist Graphic Design Track students with the development of a professional portfolio. Students pursuing the Art Studio Track will elect a concentration in one of the department's studio areas including drawing, painting, ceramics, fibers, jewelry and metals, sculpture, and wood. The BFA degree enables students to pursue substantial instruction in their area of concentration. The BFA major must successfully complete the BFA Sophomore Review where studio faculty members assess student progress within the program. During the final semester of their studies, BFA students publicly present their art in a culminating bachelor of fine arts exhibition. The bachelor of arts degree program in art studio offers students a broad range of advanced studio options. This degree option should be chosen by the student who seeks a generalized art studio program and provides opportunities for achieving double majors and minors in and outside the Department of Art and Design. The BA major must successfully complete the Sophomore Review where studio faculty members assess student progress within the program.

The mission of the bachelor of arts degree program in art/history is to provide majors with a solid foundation in the history of art, from ancient through modern times. The degree prepares students for graduate study leading to careers in museums, galleries, fine art libraries, visual resources, teaching, and research. Specific goals, objectives, and competencies related to this degree include the acquisition and demonstration of critical thinking, research, and writing skills; knowledge of terminology, methodology, and competency with various approaches to art historical inquiry; and the ability to conduct art history research through independent investigations.

The bachelor of science in education degree program in art education is a professional degree program leading to certification to teach K-12 art in the Commonwealth of Pennsylvania. The program reflects contemporary theory and practice in art studio, art history, criticism, aesthetics, visual culture, and pedagogy. The program complies with all Pennsylvania standards needed for certification to teach art in the commonwealth.

All art majors are obligated to fulfill the university requirement for Liberal Studies course work. Art education majors must achieve and maintain a 3.0 cumulative GPA. Students enrolled in the Bachelor of Fine Arts—Studio program must achieve a 2.5 cumulative GPA and earn a grade of "C" or better in all ART and ARHI courses to graduate.

The Art Studio minor is available to majors within the department whose major area of study is art education or art history; this provides further exploration in the various studio disciplines. Additionally, the Art Studio minor provides majors from other disciplines the opportunity to experience the visual arts in greater depth.

The mission of the Art History minor is to provide students with the necessary skills to critically assess the origins and changing dynamics of the visual arts. By its very nature, art history is multidisciplinary and not only develops visual literacy and tools for critical thinking, but also introduces students to the sociocultural contexts in which artworks are produced, providing students with the opportunities for understanding cultural diversity and lifelong learning.

The College of Fine Arts and the Department of Art and Design have established an exchange program with the National Art Academies of Slovenia and Croatia. Qualified and highly skilled juniors and seniors may participate in the exchange by application to the Department of Art and Design exchange coordinator and with approval of their major studio professor, the Department of Art and Design chair, and the College of Fine Arts exchange coordinator.

For detailed information regarding application to one of the degree programs and scheduling a portfolio review, please contact the department office at 724-357-2530 or by e-mail through the website www.iup.edu/art.

Bachelor of Arts

History Track, Art, BA

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

Liberal Studies Electives: 6

No courses with ARHI prefix

Major:

Foundation Required: 18

- ARHI 205 - Ancient to Medieval Art **Credits: 3**
- ARHI 207 - Renaissance through Modern Art **Credits: 3**
- ARHI 224 - Introduction to Asian Art **Credits: 3**
- ARHI 413 - Senior Seminar **Credits: 3**
- ART 112 - Fundamentals of Drawing **Credits: 3**

ART 114 - Color and Two-Dimensional Design **Credits: 3**

Controlled Electives: 27

Choose nine courses from the following:

Up to 6cr (two courses) of Art Studio, prefix ART

ARHI 100 - Arts of the 20th Century **Credits: 3**
ARHI 222
ARHI 300
ARHI 321 - History of World Ceramics **Credits: 3**
ARHI 407 - Medieval Art **Credits: 3**
ARHI 408 - Italian Renaissance Art **Credits: 3**
ARHI 409 - Baroque and Rococo Art **Credits: 3**
ARHI 410 - 19th-Century European Painting **Credits: 3**
ARHI 411 - 20th-Century European Art **Credits: 3**
ARHI 412 - Classical Art **Credits: 3**
ARHI 416
ARHI 417 - Byzantine Art **Credits: 3**
ARHI 423 - Art of Japan **Credits: 3**
ARHI 424 - Art of India and Southeast Asia **Credits: 3**
ARHI 425 - Arts of China **Credits: 3**
ARHI 493 - Internship **Credits: 3-12**

Foreign Language Required: 0-12

Foreign Language Intermediate Level (1)

Free Electives: 16-29

Total Degree Requirements: 120

(1) Intermediate-level foreign language may be included in Liberal Studies electives.

Studio Track, Art, BA

Liberal Studies: 43-44

As outlined in the Liberal Studies Requirements with the following specifications:

Fine Arts:

ARHI 205 - Ancient to Medieval Art **Credits: 3**

Mathematics: 3

Liberal Studies Elective: 3

ARHI 207 - Renaissance through Modern Art **Credits: 3**
No courses with ART prefix

Major:

Foundation Required: 12

- ART 111 - Figure Drawing **Credits: 3**
- ART 112 - Fundamentals of Drawing **Credits: 3**
- ART 113 - Three-Dimensional Design **Credits: 3**
- ART 114 - Color and Two-Dimensional Design **Credits: 3**

Beginning Studio Electives: 12

Four of the following nine courses:

- ART 211 - Painting **Credits: 3**
- ART 213 - Woodworking: Function and Form **Credits: 3**
- ART 214 - Ceramics **Credits: 3**
- ART 215 - Sculpture **Credits: 3**
- ART 217 - Print Media **Credits: 3**
- ART 218 - Introduction to Graphic Design **Credits: 3**
- ART 219
- ART 281 - Special Topics **Credits: 1-3** (may be used only once)

Art History Required: 6

- ARHI 100 - Arts of the 20th Century **Credits: 3**
- Controlled ARHI Elective: One course from any 300-400 level ARHI prefix

Intermediate/Advanced Studio Required: 12

Select 300-400 level courses from four different studio areas (1, 2)

- ART 356 - Intermediate Graphic Design II **Credits: 3**
- ART 421 - Advanced Drawing **Credits: 3**
- ART 451 - Advanced Woodworking: Function and Form **Credits: 3**
- ART 452 - Advanced Ceramics **Credits: 3**
- ART 453 - Advanced Sculpture **Credits: 3**
- ART 454 - Advanced Painting **Credits: 3**
- ART 455 - Modeling and Animation **Credits: 3-6**
- ART 456 - Advanced Web and Interactive Design **Credits: 3-6**
- ART 457 - Advanced Print Media **Credits: 3-6**
- ART 459 - Advanced Fibers **Credits: 3**
- ART 460 - Advanced Jewelry and Metals **Credits: 3**
- ART 481 - Special Topics **Credits: 1-3**
- ART 493 - Internship **Credits: 3-12**

Free Electives: 34-35

Total Degree Requirements: 120

See advisory paragraph "Timely Completion of Degree Requirements" in the section on Requirements for Graduation.

(1) Students must complete 3cr within an advanced studio before permission will be granted to enroll in the 6cr component of the advanced level. Permission of the instructor is a prerequisite to all 6cr advanced courses.

(2) Inclusion of internship credits toward any portion of fulfillment of degree requirements must be approved by the departmental chair and student's major advisor. Approval must be obtained in writing before enrollment. Students must complete the Sophomore Review.

Bachelor of Science in Education

Art Education, BSED

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 43-44

As outlined in Liberal Studies Requirements with the following specifications:

Fine Arts:

Fulfilled by

ARHI 205 - Ancient to Medieval Art **Credits: 3**

Mathematics: 3

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area : Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Elective: 3

ARHI 207 - Renaissance through Modern Art **Credits: 3**

College: 28

Professional Education Sequence:

An additional 3cr of MATH 101 or above

ACE 103 - Digital Instructional Technology **Credits: 3**

EDSP 102 - Educational Psychology **Credits: 3**

EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits: 2**

EDEX 323 - Instruction of English Language Learners with Special Needs **Credits: 2**

EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**

EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**

EDUC 421 - Student Teaching **Credits: 5-6**

EDUC 441 - Student Teaching **Credits: 5-12**

EDUC 442 - School Law **Credits: 1**

Major: 21

ARED 101 - Introduction to Art Education **Credits: 3**

ARED 215 - Issues in Art Education **Credits: 3**

ARED 215 - Issues in Art Education **Credits: 3**

ARED 317 - Art in K-6 Programs **Credits: 3**

ARED 318 - Art in 7-12 Programs **Credits: 3**

ART 112 - Fundamentals of Drawing **Credits: 3**

ART 113 - Three-Dimensional Design **Credits: 3**

ART 114 - Color and Two-Dimensional Design **Credits: 3**

Controlled Electives: 33

15 credits from any ARHI or ART prefix

3 credits from any ARED prefix

15 Credits from the Following:

ARHI 100 - Arts of the 20th Century **Credits: 3**

ART 111 - Figure Drawing **Credits: 3**

ART 211 - Painting **Credits: 3**

ART 213 - Woodworking: Function and Form **Credits: 3**

ART 214 - Ceramics **Credits: 3**

ART 215 - Sculpture **Credits: 3**

ART 216 - Jewelry and Metals **Credits: 3**

ART 217 - Print Media **Credits: 3**

ART 218 - Introduction to Graphic Design **Credits: 3**

Total Degree Requirements: 125-126

See advisory paragraph "Timely Completion of Degree Requirements" in the section on Requirements for Graduation.

Bachelor of Fine Arts

Art Studio, BFA

Liberal Studies: 43-44

As outlined in Liberal Studies Requirements with the following specifications:

Fine Arts:

ARHI 205 - Ancient to Medieval Art **Credits: 3**

Mathematics: 3

Liberal Studies Elective: 3

ARHI 207 - Renaissance through Modern Art **Credits: 3**

No courses with ART prefix

Major:

Foundation Required: 12

- ART 111 - Figure Drawing **Credits: 3**
- ART 112 - Fundamentals of Drawing **Credits: 3**
- ART 113 - Three-Dimensional Design **Credits: 3**
- ART 114 - Color and Two-Dimensional Design **Credits: 3**

Beginning Studio Electives: 15

Five of the following nine courses:

- ART 211 - Painting **Credits: 3**
- ART 213 - Woodworking: Function and Form **Credits: 3**
- ART 214 - Ceramics **Credits: 3**
- ART 215 - Sculpture **Credits: 3**
- ART 216 - Jewelry and Metals **Credits: 3**
- ART 217 - Print Media **Credits: 3**
- ART 218 - Introduction to Graphic Design **Credits: 3**
- ART 219
- ART 281 - Special Topics **Credits: 1-3** (may be used only once)

Art History Required: 6

- ARHI 100 - Arts of the 20th Century **Credits: 3**
- Controlled ARHI Elective: One course from any 300-400 level ARHI prefix

Intermediate/Advanced Studio Required: 27

(Select one of two tracks.)

Art Studio Track:

Studio areas of study include ceramics, painting, woodworking, drawing, fibers, sculpture, print media, jewelry and metals, and internship. Select from:

- ART 421 - Advanced Drawing **Credits: 3**
- ART 451 - Advanced Woodworking: Function and Form **Credits: 3**
- ART 452 - Advanced Ceramics **Credits: 3**
- ART 453 - Advanced Sculpture **Credits: 3**
- ART 454 - Advanced Painting **Credits: 3**
- ART 457 - Advanced Print Media **Credits: 3-6**
- ART 459
- ART 460 - Advanced Jewelry and Metals **Credits: 3**
- ART 481 - Special Topics **Credits: 1-3**
- ART 493 - Internship **Credits: 3-12**

Graphic Design Track:

Studio area of study includes graphic design and internship. Select from:

- ART 356 - Intermediate Graphic Design II **Credits: 3**
- ART 455 - Modeling and Animation **Credits: 3-6**
- ART 456 - Advanced Web and Interactive Design **Credits: 3-6**
- ART 481 - Special Topics **Credits: 1-3**

ART 493 - Internship **Credits:** 3-12

Primary Studio Emphasis: 18

Select any 300-400 level courses from one studio area listed in track options above. (2, 3)

Synthesis Studio: 9

Art Studio Track majors select 300-400 level courses listed within track options above that are outside students' primary studio area. These studio courses must relate to one's primary studio area emphasis conceptually and/or technically. Graphic Design Track majors may select 300-400 level graphic design courses or 300-400 level courses from the Art Studio Track if they relate conceptually and/or technically. (2, 3, 4)

Intermediate/Advanced Studio Electives: 9

Select any 300-400 level art studio courses. (1, 2)

Senior Thesis and Professional Practicum: 3

ART 400 - Professional Practices **Credits:** 3

Free Electives: 4-5

Total Degree Requirements: 120

See advisory paragraph "Timely Completion of Degree Requirements" in the section on Requirements for Graduation.

- (1) Student must achieve a cumulative 2.5 GPA and earn a "C" or better in all ART and ARHI courses to graduate.
- (2) Students must complete 3cr within an advanced studio before permission will be granted to enroll in the 6cr component of the advanced level. Permission of the instructor is a prerequisite to all 6cr advanced courses.
- (3) Inclusion of internship credits toward any portion of fulfillment of degree requirements must be approved by the departmental chair and student's major advisor. Approval must be obtained in writing before enrollment.
- (4) Synthesis studio courses must be approved by academic advisor.

Minor

Art History Minor

Required Courses: 9

ARHI 205 - Ancient to Medieval Art **Credits:** 3
ARHI 207 - Renaissance through Modern Art **Credits:** 3
ARHI 224 - Introduction to Asian Art **Credits:** 3
Three additional courses with an ARHI prefix except ARHI 101

Total Minor Requirements: 18

Art Studio Minor

Three Courses from the Following: 9

ART 111 - Figure Drawing **Credits:** 3
ART 112 - Fundamentals of Drawing **Credits:** 3
ART 113 - Three-Dimensional Design **Credits:** 3
ART 114 - Color and Two-Dimensional Design **Credits:** 3
ART 211 - Painting **Credits:** 3
ART 213 - Woodworking: Function and Form **Credits:** 3
ART 214 - Ceramics **Credits:** 3
ART 215 - Sculpture **Credits:** 3
ART 216 - Jewelry and Metals **Credits:** 3 (1)
ART 217 - Print Media **Credits:** 3
ART 218 - Introduction to Graphic Design **Credits:** 3 (1)
ART 281 - Special Topics **Credits:** 1-3

Three Courses from the Following: 9

ART 356 - Intermediate Graphic Design II **Credits:** 3
ART 421 - Advanced Drawing **Credits:** 3
ART 451 - Advanced Woodworking: Function and Form **Credits:** 3
ART 452 - Advanced Ceramics **Credits:** 3
ART 453 - Advanced Sculpture **Credits:** 3
ART 454 - Advanced Painting **Credits:** 3
ART 455 - Modeling and Animation **Credits:** 3-6
ART 456 - Advanced Web and Interactive Design **Credits:** 3-6
ART 457 - Advanced Print Media **Credits:** 3-6
ART 460 - Advanced Jewelry and Metals **Credits:** 3
ART 481 - Special Topics **Credits:** 1-3

Total Minor Requirements: 18

(1) Courses have prerequisites. Check the catalog for details and discuss course of study with minor advisor. The instructor may choose to waive the prerequisite for art studio minors.

(2) Art Minors are permitted to repeat any advanced 400-level advanced studio course multiple times to fulfill the 9cr requirement.

(3) Art Minors are not permitted to take section 002 of any 400-level advanced studio course for six credits.

Music

Website: www.iup.edu/music

Matthew Baumer, Chair

The mission of the IUP Department of Music is the professional preparation of music students as teachers, performers, composers, and scholars. We are committed to providing the highest level of creative, intellectual, and cultural experiences through curricular offerings, recitals, concerts, productions, and workshops for both the student body and the university community. The Department of Music recognizes its responsibility to serve a local and global community and to promote diversity/multiculturalism, as well as embrace and encourage lifelong advocacy for the musical arts. Degrees offered are Bachelor of Arts, Bachelor of Fine Arts, and Bachelor of Science in Education.

Admission to the Music Department requires satisfactory completion of an audition, in addition to the university general requirements. Detailed information will be sent to the applicant upon request.

The Bachelor of Arts degree is for students who desire a broad-based education while developing their musicianship, scholarship, and performance skills. This program combines a core curriculum of music studies with both general education and liberal arts courses and is ideal for students who wish to pursue a double major or minor in another academic field.

The Bachelor of Fine Arts degree (equivalent to the Bachelor of Music degree) emphasizes the application of musical knowledge and skill. The student in this program prepares to pursue a career as a professional performing musician or composer.

The Bachelor of Science in Education—Music Education is an educator preparatory program that leads to K-12 certification to teach in the schools of Pennsylvania.

Special Requirements for All Music Majors

Each student must declare a primary performing medium. Those who elect voice as their primary instrument normally elect piano as a secondary instrument. Performance juries are held at the end of each semester. Students are expected to complete the requirements for their performing area and level. Piano proficiency is required in all degree programs. Students who matriculate with keyboard skills beyond those covered in class piano must substitute, at the discretion of the keyboard area, APMU 101 - Piano I and/or APMU 151 - Piano II for a total of 2cr.

Each semester, students must participate in at least one large ensemble on their primary instrument. They must also participate in at least one small ensemble each semester, to be selected by their advisor. The large ensembles include MUSC 122 - University Chorale, MUSC 123 - Symphony Band, MUSC 124 - Concert Band, MUSC 125 - Marching Band, MUSC 129 - University Symphony Orchestra, MUSC 131 - University Wind Ensemble, MUSC 132 - Treble or Bass Chorus, and MUSC 134 - University Chorus. For pianists, guitarists, and other students whose primary instrument does not regularly feature in large ensembles, the department chair will assign suitable alternatives. Students may satisfy the ensemble requirement by enrolling in either 1cr or 0cr ensembles so long as they accrue the total number of ensemble credits required by their degree program.

Students must register for MUSC 475 - Music Lab and attend four departmental meetings and eight campus performances each semester, as required by their degree program (seven semesters for the BSEd program and eight semesters for the BA and BFA programs). Campus performances may include recitals, concerts, art exhibitions, theater productions, and so on.

In addition to a successful audition for entrance into the Department of Music, prospective students are required to complete a diagnostic music theory exam. Those who score below 70 percent on the exam must take MUSC 113 - Theory I Practicum concurrently with MUSC 115 . Students may attempt the diagnostic exam twice.

Bachelor of Arts

Music, BA

Liberal Studies: 46

As outlined in the Liberal Studies Requirements with the following specifications:

Fine Arts:

MUHI 102 - Music and Literature Survey **Credits:** 3

Humanities Literature:

One course from ENGL 210-ENGL 214, ENGL 225-ENGL 226, or ENGL 340 -ENGL 398

Mathematics:

MATH 101 - Foundations of Mathematics **Credits:** 3 or other Liberal Studies Mathematics

Natural Science:

Option II recommended

PHYS 105 - The Physics of Light and Sound **Credits:** 3 recommended

Social Science:

PSYC 101 - General Psychology **Credits:** 3

Liberal Studies Elective: 3

MUHI 301 - Music History I **Credits:** 3

No courses with MUSC prefix

Major: 39

Required Courses:

APMU (Primary) Applied Music I-VI (2cr each) **Credits:** 12

APMU 427 - Capstone Jury: Primary Instrument **Credits:** 0

MUHI 302 - Music History II **Credits:** 3

MUSC 111 - Theory Skills I **Credits:** 2

MUSC 112 - Theory Skills II **Credits:** 2

MUSC 115 - Theory I **Credits:** 3

MUSC 116 - Theory II **Credits:** 3

MUSC 153 - Class Piano I **Credits:** 1

MUSC 154 - Class Piano II **Credits:** 1

MUSC 180 - Technology for General Musicianship **Credits:** 2

MUSC 211 - Theory Skills III **Credits:** 2

MUSC 212 - Theory Skills IV **Credits:** 2

MUSC 215 - Theory III **Credits:** 3

MUSC 216 - Theory IV **Credits:** 3

MUSC 475 - Music Lab **Credits:** 0 (8 semesters of recital attendance)

Controlled Electives: 3

APMU 126 - Piano Proficiency Level I **Credits:** 0

MUSC 217 - Keyboard Harmony **Credits:** 3 (required for piano and organ majors only)

MUSC 351 - Italian Diction and Literature **Credits:** 1

MUSC 353 - French Diction and Literature **Credits:** 1

MUSC 354 - German Diction and Literature **Credits:** 1 (required for voice majors only)

MUSC 120-MUSC 140 (4 semesters of music ensembles) **Credits:** 0-3

Free Electives: 32

(1)

Total Degree Requirements: 120

1) Students are encouraged to consider a minor in another department.

Bachelor of Science in Education

Music Education, BSED

Also see requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 43

As outlined in the Liberal Studies Requirements with the following specifications:

Fine Arts:

Fulfilled by courses in the major

Humanities:

MUHI 102 - Music and Literature Survey **Credits: 3**

Mathematics: 3

One of the following

MATH 101 - Foundations of Mathematics **Credits: 3**

MATH 105 - College Algebra **Credits: 3**

MATH 110 - Elementary Functions **Credits: 3**

MATH 217 - Probability and Statistics **Credits: 3**

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area : Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 6

MUHI 301 - Music History I **Credits: 3**

MUHI 302 - Music History II **Credits: 3**

College: 32

Professional Education Sequence:

EDEX 323 - Instruction of English Language Learners with Special Needs **Credits: 2**

EDSP 102 - Educational Psychology **Credits: 3**

EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**

EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**

EDUC 421 - Student Teaching **Credits: 5-6**

EDUC 441 - Student Teaching **Credits: 5-12**

EDUC 442 - School Law **Credits: 1**

MUSC 240 - Technology in the Music Classroom **Credits: 2**
MUSC 331 - Elementary Methods **Credits: 2**
MUSC 333 - Instrumental Methods **Credits: 2**
MUSC 335 - Music for Students with Disabilities in Inclusive Settings **Credits: 1**
MUSC 337 - General/Choral Methods **Credits: 2**

One Additional Course from

MATH 101 - Foundations of Mathematics **Credits: 3**
MATH 105 - College Algebra **Credits: 3**
MATH 110 - Elementary Functions **Credits: 3**
MATH 217 - Probability and Statistics **Credits: 3**

Major: 53

Required Courses:

APMU (Primary) Applied Music I-VII **Credits: 14**
APMU 427 - Capstone Jury: Primary Instrument **Credits: 0**
MUSC 111 - Theory Skills I **Credits: 2**
MUSC 112 - Theory Skills II **Credits: 2**
MUSC 115 - Theory I **Credits: 3**
MUSC 116 - Theory II **Credits: 3**
MUSC 120-MUSC 140 7 semesters of music ensembles (0-1cr each) **Credits: 0-1**
MUSC 190 - Introduction to Music Education **Credits: 1**
MUSC 211 - Theory Skills III **Credits: 2**
MUSC 212 - Theory Skills IV **Credits: 2**
MUSC 215 - Theory III **Credits: 3**
MUSC 216 - Theory IV **Credits: 3**
MUSC 311 - Fundamentals of Conducting **Credits: 2**
MUSC 312 - Choral Conducting **Credits: 2**
or
MUSC 313 - Instrumental Conducting **Credits: 2**
MUSC 475 - Music Lab **Credits: 0** (7 semesters of recital attendance)

Concentration Area Courses:

(select one concentration)

Voice Concentration

APMU 101 - Piano I **Credits: 1**
APMU 151 - Piano II **Credits: 1**
APMU 201 - Piano III **Credits: 1**
APMU 251 - Piano IV **Credits: 1**
APMU 127 - Piano Proficiency Level II **Credits: 0**
MUSC 351 - Italian Diction and Literature **Credits: 1**
MUSC 353 - French Diction and Literature **Credits: 1**
MUSC 354 - German Diction and Literature **Credits: 1**

Select Two of the Following Class Instrument Courses: 2

MUSC 155 - Class Strings I **Credits: 1**
MUSC 157 - Class Percussion I **Credits: 1**

MUSC 159 - Class Brass I **Credits:** 1
MUSC 161 - Class Woodwinds I **Credits:** 1

Instrumental Concentration

APMU 126 - Piano Proficiency Level I **Credits:** 0
MUSC 121 - Chamber Singers **Credits:** 0/1
or
MUSC 122 - University Chorale **Credits:** 0/1
or
MUSC 134 - University Chorus **Credits:** 0-1
MUSC 151 - Class Voice I **Credits:** 1
MUSC 153 - Class Piano I **Credits:** 1
MUSC 154 - Class Piano II **Credits:** 1
MUSC 155 - Class Strings I **Credits:** 1
MUSC 157 - Class Percussion I **Credits:** 1
MUSC 159 - Class Brass I **Credits:** 1
MUSC 161 - Class Woodwinds I **Credits:** 1

Controlled Electives:

Select courses with MUSC, MUHI, or APMU prefixes to earn a total of 53cr in major.

Total Degree Requirements: 128

Bachelor of Fine Arts

Music Performance, BFA

Liberal Studies: 43

As outlined in the Liberal Studies Requirements with the following specifications:

Fine Arts:

MUHI 102 - Music and Literature Survey **Credits:** 3

Humanities Literature:

Fulfilled by

MUHI 102 - Music and Literature Survey **Credits:** 3

Mathematics:

MATH 101 - Foundations of Mathematics **Credits:** 3 or other 3cr Liberal Studies Mathematics

Natural Science: Option II recommended

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area : Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

PHYS 105 - The Physics of Light and Sound **Credits:** 3 recommended

Social Science:

PSYC 101 - General Psychology **Credits:** 3

Liberal Studies Electives: 6

MUHI 301 - Music History I **Credits:** 3

MUHI 302 - Music History II **Credits:** 3

No courses with MUSC prefix

Major: 54-56

Required Courses:

APMU (Primary) Applied Music I-VIII (4cr each) **Credits:** 30-32 (1)

APMU 427 - Capstone Jury: Primary Instrument **Credits:** 0

MUSC 111 - Theory Skills I **Credits:** 2

MUSC 112 - Theory Skills II **Credits:** 2

MUSC 115 - Theory I **Credits:** 3

MUSC 116 - Theory II **Credits:** 3

MUSC 180 - Technology for General Musicianship **Credits:** 2

MUSC 211 - Theory Skills III **Credits:** 2

MUSC 212 - Theory Skills IV **Credits:** 2

MUSC 215 - Theory III **Credits:** 3

MUSC 216 - Theory IV **Credits:** 3

MUSC 311 - Fundamentals of Conducting **Credits:** 2

MUSC 475 - Music Lab **Credits:** 0 (8 semesters of recital attendance)

Controlled Electives: 21-23

All Concentrations

MUSC 120-MUSC 140 Music Ensembles (2) **Credits:** 8

Electives with APMU, MUSC (but not 120-140), or MUHI prefix **Credits:** 0-11

Keyboard Majors

MUSC 217 - Keyboard Harmony **Credits:** 3

MUSC 405 - Piano Pedagogy **Credits:** 3

Voice Majors

APMU 126 - Piano Proficiency Level I **Credits:** 0

MUSC 153 - Class Piano I **Credits:** 1

MUSC 154 - Class Piano II **Credits:** 1

MUSC 351 - Italian Diction and Literature **Credits:** 1

MUSC 353 - French Diction and Literature **Credits:** 1

MUSC 354 - German Diction and Literature **Credits:** 1

MUSC 406 - Vocal Pedagogy **Credits:** 3

Foreign language course at 100-level or above (critical languages excluded)

String Majors

APMU 126 - Piano Proficiency Level I **Credits: 0**
MUSC 153 - Class Piano I **Credits: 1**
MUSC 154 - Class Piano II **Credits: 1**
MUSC 403 - Practicum in String Pedagogy **Credits: 0/1**
MUSC 404 - String Pedagogy **Credits: 2**

Wind and Percussion Majors

APMU 126 - Piano Proficiency Level I **Credits: 0**
APMU 480 - Wind and Percussion Pedagogy **Credits: 2**
MUSC 153 - Class Piano I **Credits: 1**
MUSC 154 - Class Piano II **Credits: 1**

Composition Majors

MUSC 217 - Keyboard Harmony **Credits: 3**
MUSC 315 - Theory V **Credits: 3**
MUSC 417 - Orchestration **Credits: 3**

Total Degree Requirements: 120

(1) Voice, keyboard, and string majors will take eight semesters of 4cr lessons (32cr). Wind and percussion majors will take seven semesters of 4cr lessons and one semester of 2cr lessons (30cr). Composition majors will take up to 16cr of composition lessons.

(2) Students are required to participate in ensembles for five hours a week each semester for eight semesters

Minor

Music Minor

(1)

Required Courses: 15-18

APMU XXX - Applied Music **Credits: 2 (2)**
MUSC 115 - Theory I **Credits: 3**
MUSC 111 - Theory Skills I **Credits: 2**
or
MUSC 116 - Theory II **Credits: 3**

2-4 Semesters of the Following:

MUSC 120-MUSC 140 (1cr each) 6cr of MUHI or MUSC 300-level or above **Credits: 6**

Electives: 0-3

Courses with MUSC, MUHI or APMU (by permission only) prefix, **except** ensembles (MUSC 120-MUSC 140) and courses in the music education sequence (MUSC 155, MUSC 157, MUSC 159, MUSC 161, MUSC 219, MUSC 240, MUSC 331, MUSC 333, MUSC 335, MUSC 337)

Total Minor Requirements: 18

(1) Students must audition to be admitted into the minor.

(2) Admitted minors will receive one semester of 2cr applied lessons and may (when possible) receive further semesters depending on instructor availability. Students must be enrolled in an ensemble (as advised) during any semester in which they receive applied lessons.

Theatre, Dance, and Performance

Website: www.iup.edu/theater

Brian R. Jones, Chair

The Department of Theatre, Dance, and Performance leads innovation to transform local, regional, national and global communities through diverse artistic practices. A classic, eclectic, and broad education provides a foundation for innovative, leading-edge courses and career path preparation led by an experienced faculty. It is dedicated to both theatre and dance as collaborative and highly disciplined fields offering an extended view of the world as a part of a liberal and humanistic education. The department takes a broad view of performance in its traditional, applied and experimental forms. Study and practice include design, technology, management and dramaturgy as requisite knowledge and skills. As a result, successful students develop an artistic sensibility, critical analysis, creative orientation, and a disciplined work ethic, skills necessary in most endeavors. They will be able to:

- apply an aesthetic sensibility through informed and knowledgeable critiques of live performance
- create work of artistic expression or technical craftsmanship in at least one area of production
- engage diverse audiences by transforming knowledge into understanding, and understanding into social impact
- utilize the skills, knowledge and techniques of theatre, dance, and performance to gain and keep employment in the performing arts, or in other fields in which these attributes can be gainfully applied.

The department offers a bachelor of arts degree in theatre with concentrations and a track in Musical Theatre, providing for the study of theatre within a broad liberal arts education. The department also coordinates the Interdisciplinary Fine Arts degree – Dance Arts Track. The department offers a Dance minor and a Theatre minor. The Dance minor and Theatre minor each require 18 controlled credits.

Bachelor of Arts

Musical Theatre Track, Theatre, BA

The **BA in Theatre, Musical Theatre Track** degree offers students knowledge of and training in all aspects of musical theatre within a liberal arts. Students entering the program will be advised to explore many dimensions of theatre, music, and dance and develop as singing actors with well-developed additional skills and knowledge. Successful graduates will be able to compete for employment opportunities in the entertainment industry where musical talent is utilized. They will be capable of applying their learning to a wide variety of career options including, but not limited to, performance. For students intent on a professional career in performance, additional learning through free electives (and even a minor area of study) is advised in acting, voice training, music proficiency, and dance.

The program combines strengths of the voice program of the Music Department with the performance programs of the Theatre, Dance and Performance Department. An audition for both departments is required for entry into this challenging program.

Musical Theatre students will perform in main stage musicals of all genres, cabaret offerings, and studio performances.

As a practical extension of the academic program, the department offers a variety of production opportunities in the Theater-by-the-Grove main stage and studio theaters. The IUP Dance Theater performs twice annually.

Admission to the Theatre program requires satisfactory completion of an audition or interview, in addition to the university's general admission requirements. Audition information is available at www.iup.edu/theater.

The Department of Theatre, Dance and Performance is a fully accredited institutional member of the National Association of Schools of Theatre (NAST).

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Fine Arts:

MUHI 101 - Introduction to Music **Credits: 3**

or

DANC 102 - Introduction to Dance **Credits: 3**

Mathematics: 3

Liberal Studies Electives: 6

No courses with THTR prefix

Major: 42

(1)

Foundation Studies Courses: 14

MUSC 111 - Theory Skills I **Credits: 2**

MUSC 115 - Theory I **Credits: 3**

THTR 111 - Foundations of Theater **Credits: 3**

THTR 211 - History and Literature: Classical **Credits: 3**

or

THTR 212 - History and Literature: Renaissance **Credits: 3**

THTR 371 - Musical Theater History **Credits: 3**

Core Skills Courses: 19

APMU 105 - Voice I **Credits: 1**

APMU 155 - Voice II **Credits: 1**

APMU 205 - Voice II **Credits: 1**

APMU 255 - Voice III **Credits: 1**

DANC 260 - Beginning Jazz Dance **Credits: 3**

or

DANC 485 - Dance Studio **Credits: 3** (Jazz) (2)

DANC 280 - Beginning Ballet **Credits: 3**

or

DANC 485 - Dance Studio **Credits: 3** (Ballet) (2)

THTR 240 - Acting I **Credits: 3** (3)

THTR 372 - Musical Theater Auditioning **Credits: 3**

One of the Following:

THTR 116 - Fundamentals of Theatrical Design **Credits: 3**

THTR 120 - Stagecraft **Credits: 3**

THTR 122 - Costume Workshop **Credits: 3**

THTR 221 - Basic Stage Lighting **Credits: 3**

THTR 226 - Stage Management **Credits: 3**

Experiential Learning: 5

(4)

MUSC 126 - Music Theater **Credits:** 0/1 (5)
MUSC 128 - Opera/Musical in Production Ensemble **Credits:** 0/1 (5)
THTR 486 - Practicum in Production **Credits:** 0-3 (6)
THTR 493 - Internship **Credits:** 3-12

Electives: 3

Select 3 cr from the following:

DANC 270 - Beginning Ballroom and Tap Dance **Credits:** 3
DANC 485 - Dance Studio **Credits:** 3
MUSC 153 - Class Piano I **Credits:** 1
THTR 340 - Acting II **Credits:** 3
THTR 350 - Directing **Credits:** 3
THTR 373 - Musical Theater Scene Study **Credits:** 3
THTR 471 - Musical Theater Performance **Credits:** 3

Capstone: 1

THTR 480 - Theater Seminar **Credits:** 1

Free Electives: 28-29

Total Degree Requirements: 120

- (1) Students must achieve a "C" or better in all major courses to graduate.
- (2) Level of dance studio competence will determine placement by faculty.
- (3) Proficiency in acting studio fundamentals is prerequisite. Students who do not demonstrate proficiency at audition will be required to take THTR 140.
- (4) Completion of eight different production experiences required.
- (5) Proficiency in music theory is prerequisite. Students who do not demonstrate proficiency at audition will be required to take MUSC 110.
- (6) Repeated for credit.

Theatre, BA

Liberal Studies: 43-44

As outlined in the Liberal Studies Requirements with the following specifications:

Fine Arts:

Any except:

THTR 101 - Introduction to Theatre **Credits:** 3

Mathematics: 3

Liberal Studies Electives: 3

No courses with THTR prefix

Major: 42

(1)

Foundation Courses:

THTR 111 - Foundations of Theater **Credits: 3**

THTR 116 - Fundamentals of Theatrical Design **Credits: 3**

THTR 211 - History and Literature: Classical **Credits: 3**

or

THTR 212 - History and Literature: Renaissance **Credits: 3**

THTR 213 - History and Literature: Modern and Contemporary **Credits: 3**

Core Skills Courses:

THTR 120 - Stagecraft **Credits: 3**

THTR 122 - Costume Workshop **Credits: 3**

THTR 140 - Foundations of Performance **Credits: 3**

THTR 226 - Stage Management **Credits: 3**

Theater Electives in Concentration Areas:

Choose one area:

Design/Tech/Management Area

THTR 225 - Theater Graphics **Credits: 3**

THTR 489 - Design/Technology/Management Studio **Credits: 3**

Electives: 6

Two courses from the following:

DANC 355 - Dance Production: Administration to Creation **Credits: 3**

THTR 221 - Basic Stage Lighting **Credits: 3**

THTR 223 - Makeup for the Stage **Credits: 3**

THTR 320 - Scene Design **Credits: 3**

THTR 321 - Stage Lighting Design **Credits: 3**

THTR 322 - Costume Design **Credits: 3**

THTR 323 - Sound Design **Credits: 3**

THTR 324 - Advanced Stagecraft **Credits: 3**

Performance Area

THTR 130 - Stage Voice **Credits: 3**

or

THTR 131 - Stage Movement **Credits: 3**

THTR 240 - Acting I **Credits: 3**

THTR 340 - Acting II **Credits: 3**

Electives: 3

One course from the following:

- DANC 485 - Dance Studio **Credits: 3**
- THTR 231 - Improvisation and Creativity **Credits: 3**
- THTR 341 - Acting Styles **Credits: 3**
- THTR 342 - Acting Shakespeare **Credits: 3**
- THTR 350 - Directing **Credits: 3**
- THTR 487 - Acting Studio **Credits: 3**

Theory and Criticism Area

- THTR 310 - Theater Criticism **Credits: 3**
- THTR 311 - Dramaturgy **Credits: 3**

Electives:

Two courses from the following:

- THTR 350 - Directing **Credits: 3**
- ENGL 308 - Critical Theory **Credits: 3**
- ENGL 343 - Drama **Credits: 3**
- ENGL 350 - Gender and Sexual Orientation in Literature, Theory, and Film **Credits: 3**
- ENGL 434 - Shakespeare **Credits: 3**
- ENGL 450 - Film Theory **Credits: 3**
- ENGL 460 - Topics in Film **Credits: 3**
- ENGL 463 - Topics in Global Literature and Film **Credits: 3**
- ENGL 466 - Topics in Theory **Credits: 3**

General Studies Area

- THTR and/or DANC prefix courses as advised **Credits: 12**

Production Practicum:

- (2)
THTR 486 - Practicum in Production **Credits: 0-3**

Capstone:

- THTR 480 - Theater Seminar **Credits: 1**

Free Electives: 34-35

Total Degree Requirements: 120

(1) Students must achieve a "C" or better in all major courses to graduate.

(2) Students are required to be enrolled in THTR 486 while a theatre major. Students must complete five different practicum assignments, with at least one assignment in design, technical, or management areas. With prior approval of the department chair, THTR 493 may be substituted.

Minor

Dance Minor

The Dance minor provides a foundation for those interested in teaching dance, working in administration with a dance company, managing a private dance studio, working with theatre productions, or desiring a broad-based education within the dance discipline.

The minor is an 18-credit program with 6 required and 12 advised elective credits. The required credits include pertinent foundation courses and advanced-level theory courses. The required courses also provide a comprehensive study of production elements, fundamental and historical theories of dance, and dance choreographic and teaching theories that cannot be obtained in any of the elective courses. The advised elective credits include the technique courses.

The Dance minor is based on the National Standards for Arts Education dance requirements. Using this basis for the program ensures fundamental preparation for a number of students' needs, e.g., the dance teacher, the performer, and the dance studio owner.

Through advisement, the minor program can serve the individual student's needs. The program would be of interest to majors in secondary and elementary education, small business, recreation and physical education, theatre, music, and interdisciplinary fine arts and anyone who has an interest in dance and wants to broaden his or her liberal arts education.

Required Courses: 6

DANC 102 - Introduction to Dance **Credits: 3**

One Course from the Following:

DANC 351 - Choreography **Credits: 3**

DANC 353 - Dance Curriculum and Instruction **Credits: 3**

DANC 355 - Dance Production: Administration to Creation **Credits: 3**

Four Courses from the Following as Advised: 12

DANC 150 - Fundamentals of Dance **Credits: 3**

DANC 250 - Beginning Modern Dance **Credits: 3**

DANC 260 - Beginning Jazz Dance **Credits: 3**

DANC 270 - Beginning Ballroom and Tap Dance **Credits: 3**

DANC 280 - Beginning Ballet **Credits: 3**

DANC 290 - Ethnic Dance **Credits: 3**

DANC 485 - Dance Studio **Credits: 3**

Total Minor Requirements: 18

Theatre Minor

The Theatre minor provides a foundation; students must meet with the department chair for initial advisement to be admitted into the minor. The minor will be tailored to individual student goals with a course plan.

Required Course: 3

THTR 111 - Foundations of Theater **Credits: 3**

One Course from the Following: 3

THTR 120 - Stagecraft **Credits: 3**

THTR 122 - Costume Workshop **Credits:** 3
THTR 221 - Basic Stage Lighting **Credits:** 3
THTR 486 - Practicum in Production **Credits:** 0-3 (2)

Electives: 12-15

Courses with a THTR prefix as advised

Total Minor Requirements: 18

(1) THTR 101 satisfies the Liberal Studies Fine Arts requirement but may not be counted toward the Theatre minor.

(2) Practicum credit is gained through assignment to theatre and dance company productions under the supervision of a faculty member. It is usually granted at 1-2cr for an assignment. Therefore, more than one assignment will need to be completed if a student wishes to accumulate exactly 18cr in the minor. It is possible to complete one practicum assignment and complete the balance of the minor with additional electives. This will usually result in 19 or 20cr in the minor.

(3) Six credits at 300 level or above is required.

Other Programs

Bachelor of Arts

Dance Arts Track, Interdisciplinary Fine Arts, BA

The Interdisciplinary Fine Arts major is available for students desiring to combine course work within the departments of Art, Music, and Theatre and Dance and selected courses within other colleges. Students must enter into a college department through an audition. Currently the only Interdisciplinary Fine Arts track available is Dance Arts.

The Interdisciplinary Fine Arts/Dance Arts Track is coordinated by the Director of Dance in the Department of Theatre, Dance and Performance. It focuses on the art of dance by integrating the studio practice and classroom study of dance with a secondary focus on theatre, music, art, and/or specified related studies. Students can be admitted to this track after completion of a dance audition and interview. This track is designed to give each major a well-advised, customized education in preparation for one of the many possible career outcomes within, or related to, the dance discipline.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Fine Arts:

MUHI 101 - Introduction to Music **Credits:** 3

Liberal Studies Electives: 6

No courses with FIAR prefix

Major: 42

(1)

Required Courses:

Dance: 9

- DANC 102 - Introduction to Dance **Credits: 3**
- DANC 351 - Choreography **Credits: 3**
- DANC 355 - Dance Production: Administration to Creation **Credits: 3**

Dance Technique: 21

(1)

- DANC 150 - Fundamentals of Dance **Credits: 3**
- DANC 250 - Beginning Modern Dance **Credits: 3**
or
- DANC 485 - Dance Studio **Credits: 3** (Modern)
- DANC 260 - Beginning Jazz Dance **Credits: 3**
or
- DANC 485 - Dance Studio **Credits: 3** (Jazz)
- DANC 270 - Beginning Ballroom and Tap Dance **Credits: 3**
or
- DANC 485 - Dance Studio **Credits: 3** (Ballroom and Tap)
- DANC 280 - Beginning Ballet **Credits: 3**
or
- DANC 485 - Dance Studio **Credits: 3** (Ballet)
- DANC 290 - Ethnic Dance **Credits: 3**
- THTR 486 - Practicum in Production **Credits: 0-3** (2)

Theater:

One course from the following:

- THTR 116 - Fundamentals of Theatrical Design **Credits: 3**
- THTR 122 - Costume Workshop **Credits: 3**
- THTR 221 - Basic Stage Lighting **Credits: 3**
- THTR 223 - Makeup for the Stage **Credits: 3**

Ensemble/Production/Exhibition Requirements: 2-3

- THTR 486 - Practicum in Production **Credits: 0-3**

Controlled Electives: 6-7cr

(as advised)

- ART 112 - Fundamentals of Drawing **Credits: 3**
- ART 113 - Three-Dimensional Design **Credits: 3**
- ART 215 - Sculpture **Credits: 3**
- DANC 353 - Dance Curriculum and Instruction **Credits: 3**
- DANC 485 - Dance Studio **Credits: 3** (Modern)
- DANC 485 - Dance Studio **Credits: 3** (Ballet)
- DANC 485 - Dance Studio **Credits: 3** (Ballroom and Tap)
- DANC 485 - Dance Studio **Credits: 3** (Jazz)
- FSMR 456 - Historic Costume **Credits: 3**
- KHSS 175 - Prevention and Care of Injuries to the Physically Active **Credits: 2**
- KHSS 221 - Human Structure and Function **Credits: 3**
- MUSC 110 - Fundamentals of Theory **Credits: 3**

MUSC 115 - Theory I **Credits: 3**
MUSC 126 - Music Theater **Credits: 0/1**
THTR 116 - Fundamentals of Theatrical Design **Credits: 3**
THTR 122 - Costume Workshop **Credits: 3**
THTR 221 - Basic Stage Lighting **Credits: 3**
THTR 223 - Makeup for the Stage **Credits: 3**
THTR 321 - Stage Lighting Design **Credits: 3**
THTR 322 - Costume Design **Credits: 3**
THTR 486 - Practicum in Production **Credits: 0-3 (1-3cr)**

Free Electives: 31-32

Total Degree Requirements: 120

(1) Placement for technique level requirements will be determined by the Dance faculty based on student's previous training and/or current technique level (DANC 250, DANC 260, DANC 270, DANC 280, DANC 290, and the corresponding 486 studio level courses).

(2) Students are required to have 3cr of practicum for dance performance assignments and a 2-3 cr senior project assignment. Students may select to take additional practicum assignments within their advised electives.

College of Health and Human Services

Sylvia S. Gaiko, Dean

Amy R. Cook, Assistant Dean for Business Operations
Jonathon Cooper, Dean's Associate for Academic Affairs
Kristi Storti, Dean's Associate for Administration

Website: www.iup.edu/healthhumanserv

The College of Health and Human Services comprises nine multifaceted departments that offer 26 programs leading to a baccalaureate degree, 16 master's degree programs, eleven minors, three credit-bearing certificate programs, and six noncredit certificate programs. The departments in the college are Criminology and Criminal Justice; Culinary Arts; Employment and Labor Relations; Food and Nutrition; Kinesiology, Health, and Sport Science; Hospitality Management; Human Development, Fashion, and Interior Design; Nursing and Allied Health Professions; and Safety Sciences.

The college offers degrees in areas relevant to workforce needs and prides itself on having established a learning-centered environment in which the curricula bridge theory and practice. Hands-on fieldwork, observations, internships, clinical experiences, service-learning opportunities, and cooperative education are regular components of the curricula and provide valuable learning experiences for students. Instructional methods are often cooperative and collaborative, affording students the opportunity to understand what they can contribute to and gain from collective efforts. Discovery based instruction provides opportunities to learn about a discipline by practicing in the field. Media technology, an ever-expanding resource, provides access to worldwide information. Faculty members recognize the central role of the learner in the learning process and strive to create integrated, holistic learning environments. The focus on learning is a commitment to the continuous improvement of the quality of education offered by the college.

The mission of the College of Health and Human Services is to serve the public interest by preparing professionals for applied professional disciplines. Graduates will be compassionate, affirm high personal and professional standards, provide future leadership, and be committed to creating and advancing knowledge in their discipline.

College Majors

Baking and Pastry (AAS)
Criminology (Pre-law Track available)
Culinary Arts (AAS)
Fashion Merchandising
Health and Physical Education (Tracks available: K-12 Teacher Education*, Community Health Education, Recreation Leisure)
Hospitality Management (AS and BS) (Concentrations available: Hotel and Lodging, Special Events/Tourism Management)

Human Resources and Employment Relations (graduate program only)

Human Development and Family Science

Interior Design

Family and Consumer Sciences Education K-12*

Medical Technology

Medical Imaging (Tracks available: Nuclear Medical Technology, Diagnostic Medical Sonography, Echocardiography)

Nutrition (Tracks available: Culinary Dietetics, Dietetics, Nutrition)

Nursing (Licensed Practical Nurse Track available)

Physical Education and Sport (Tracks available: Exercise Science, Pre-Athletic Training, Sport Administration)

Public Health (Tracks available: Behavioral and Mental Health, Environmental and Occupational Health, Epidemiology and Biostatistics, Global and Rural Communities)

Respiratory Care (Certified Respiratory Therapist Track available)

Safety, Health, and Environmental Applied Sciences

College Minors

Child Development and Family Relations

Community Health

Criminology

Exercise Science

Family and Consumer Science

Hospitality Management

Hotel and Lodging Management

Nutrition

Restaurant and Food Service Management

Safety, Health, and Environmental Applied Sciences

Special Event/Tourism Management

Sport Management

Credit Certificate Programs

Athletic Coaching

Gerontology

Noncredit Certificate Programs

Baking and Pastry

Clinical Medical Assistant

Criminal Justice Training

Culinary

Emergency Medical Technician

Paramedic

* Programs leading to PA Teacher Certification, also available Driver Education

Interdisciplinary Programs, Minors and Certificates

The interdisciplinary degree programs, minors, and certificates are multidisciplinary and are not specific to one university college. Visit Interdisciplinary Programs to view offerings and requirements

Criminology and Criminal Justice

Website: www.iup.edu/criminology

Dan Lee, Chair

The Department of Criminology and Criminal Justice offers students seeking careers in criminology or criminal justice a broad liberal arts education that encourages them to think critically about crime and justice issues and prepares them for careers in the criminal justice system. The degree programs offered are the bachelor of arts program in criminology and the bachelor of arts program in criminology/pre-law. Additionally, students may minor in criminology. Through the School of Graduate Studies and Research, the department also offers graduate work at both the master's and doctoral levels.

The program in criminology and criminal justice has a fivefold objective:

- The education of students for employment and leadership in the expanding field of criminology and criminal justice
- The education of presently employed criminal justice personnel who recognize a need for furthering their education
- The instruction of students who wish to acquire an understanding of the processes of criminal justice as a cultural part of their higher education
- The instruction of students who wish to prepare for graduate study and/ or research in criminology
- A curriculum that provides an excellent foundation for students preparing for a career in law

Nearly every level of government offers opportunities for professional careers in criminology and criminal justice. For example, employment opportunities normally exist in more than 50 federal agencies (e.g., Federal Bureau of Investigation, US Department of Treasury, Federal Bureau of Prisons). Graduates also will find employment in local and state organizations including law enforcement (e.g., Pennsylvania State Police, various municipal police departments) and correctional agencies (e.g., probation, parole, Pennsylvania Department of Corrections). Additionally, there are a wide variety of opportunities in the expanding fields of private, commercial, and industrial security, including cybersecurity. Furthermore, many governmental agencies have specialized units dealing with juveniles, community relations, training, education, and research. Career opportunities also are available in research and teaching at the college level and in research divisions of various agencies.

Criminal Justice Training Center (CJTC)

The CJTC provides high-quality education and training programs for the continuing professionalism of the criminal justice system. The CJTC is one of only 17 schools in the commonwealth certified to offer Act 120 training, a 924-hour program that qualifies graduates to be municipal police officers. The police academy is located at the Indiana campus at IUP and various satellite locations. The center also offers programs for in-service personnel in fulfillment of annual mandatory continuing education requirements and nonmandatory courses such as Basic and Advanced Accident Investigation, Perceptual Driving, and Instructor Development. Lethal Weapons Training, Act 235, provides the basic requirements and mandatory recertification for armed security personnel. Visit the website www.iup.edu/crimjustice/ for more information.

The Department of Criminology and Criminal Justice will accept the Pennsylvania Act 120 Graduation Certificate from any Pennsylvania Municipal Police Officer Education and Training Commission (MPOETC) approved academy or the graduation certificate from the Pennsylvania State Police Training Academy for fifteen hours of academic credit towards criminology free electives for students enrolled in IUP's Department of Criminology and Criminal Justice.

CRIM 1XX Laws and Procedures (3c-0l-3cr)

CRIM 1XX Patrol Procedures and Investigations (3c-0l-3cr)

CRIM 1XX Cultural Diversity and Human Relations (3c-0l-3cr)

CRIM 1XX Crisis Management and Families in Crisis (3c-0l-3cr)

CRIM 1XX Physical and Emotional Readiness (3c-0l-3cr)

To receive transfer of these academic credits, the student must present the official PA Act 120 Graduation Certificate from the appropriate MPOETC approved academy or the official graduation diploma from the Pennsylvania State Police Training Academy to the Office of Admissions-Transfer Services. Application of these credits for graduation requirements other than by IUP's Department of Criminology and Criminal Justice must be approved by the individual department.

Bachelor of Arts

Criminology, BA

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 217 - Probability and Statistics **Credits: 3**

Natural Science:

Recommended:

SCI 107 - Chemistry for Everyone **Credits: 3**
SCI 117 - Chemistry for Everyone Laboratory **Credits: 1**
CHEM 105 - The Forensic Chemistry of CSI **Credits: 3**
or
BIOL 106 - Human Genetics and Health **Credits: 3**
BIOL 116 - Human Genetics and Health Laboratory **Credits: 1**
and
BIOL 107 - Introduction to Forensic Biology **Credits: 3**

Social Science:

CRIM 101 - Crime and Justice Systems **Credits: 3**

Liberal Studies Electives: 6

No courses with CRIM prefix

Major: 33

Required Courses:

CRIM 102 - Survey of Criminology **Credits: 3**
CRIM 306 - Criminological Research Methods **Credits: 3**
CRIM 400 - Theoretical Criminology **Credits: 3**
CRIM 401 - Contemporary Issues in Criminology **Credits: 3**
CRIM 403 - Dilemmas in Criminology and Criminal Justice **Credits: 3**

Controlled Electives:

Two courses from each group:

Group A: The Criminal Justice System: 6

CRIM 205 - Policing and the Community **Credits: 3**
CRIM 215 - Survey of Courts and the Criminal Justice System **Credits: 3**
CRIM 225 - Survey of Corrections **Credits: 3**
CRIM 235 - Survey of Juvenile Justice and Juvenile Law **Credits: 3**
CRIM 255 - Law, Social Control, and Society **Credits: 3**

Group B: Critical Issues in Criminology 6

CRIM 344 - Terrorism **Credits: 3**
CRIM 354 - White-Collar Crime **Credits: 3**
CRIM 374 - Environmental Crime and Justice **Credits: 3**
CRIM 384 - Violence and Victimology **Credits: 3**
CRIM 394 - Crime and Delinquency Prevention **Credits: 3**

Group C: Diversity Issues in Criminology 6

CRIM 410 - Race, Ethnicity, Social Structure, and Crime **Credits: 3**

CRIM 450 - Women and Crime **Credits: 3**

CRIM 470 - Comparative Study of Justice **Credits: 3**

Free Electives: 40-41

(1)

Total Degree Requirements: 120

(1) Completion of a minor is strongly recommended.

Pre-law Track, Criminology, BA

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 217 - Probability and Statistics **Credits: 3**

Natural Science:

recommended:

CHEM 111 - General Chemistry I **Credits: 4**

CHEM 112 - General Chemistry II **Credits: 4**

or

BIOL 103 - Life on Earth **Credits: 4**

BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**

Social Science:

CRIM 101 - Crime and Justice Systems **Credits: 3**

Liberal Studies Electives: 6

No courses with CRIM prefix

Major: 33

Required Courses:

CRIM 102 - Survey of Criminology **Credits: 3**

CRIM 306 - Criminological Research Methods **Credits: 3**

CRIM 400 - Theoretical Criminology **Credits: 3**

CRIM 401 - Contemporary Issues in Criminology **Credits: 3**

CRIM 403 - Dilemmas in Criminology and Criminal Justice **Credits: 3**

Controlled Electives:

Two courses from each group:

Group A: The Criminal Justice System: 6

- CRIM 205 - Policing and the Community **Credits: 3**
- CRIM 215 - Survey of Courts and the Criminal Justice System **Credits: 3**
- CRIM 225 - Survey of Corrections **Credits: 3**
- CRIM 235 - Survey of Juvenile Justice and Juvenile Law **Credits: 3**
- CRIM 255 - Law, Social Control, and Society **Credits: 3**

Group B: Critical Issues in Criminology 6

- CRIM 344 - Terrorism **Credits: 3**
- CRIM 354 - White-Collar Crime **Credits: 3**
- CRIM 374 - Environmental Crime and Justice **Credits: 3**
- CRIM 384 - Violence and Victimology **Credits: 3**
- CRIM 394 - Crime and Delinquency Prevention **Credits: 3**

Group C: Diversity Issues in Criminology 6

- CRIM 410 - Race, Ethnicity, Social Structure, and Crime **Credits: 3**
- CRIM 450 - Women and Crime **Credits: 3**
- CRIM 470 - Comparative Study of Justice **Credits: 3**

Other Requirements: Pre-law Interdisciplinary Track: 15-21

Seven courses, including at least one from each of six areas:

Business:

- ACCT 201 - Accounting Principles I **Credits: 3**
- ACCT 202 - Accounting Principles II **Credits: 3**
- BLAW 235 - Legal Environment of Business **Credits: 3**

Economics:

- ECON 121 - Principles of Macroeconomics **Credits: 3**
- ECON 122 - Principles of Microeconomics **Credits: 3**
- ECON 332

English:

- ENGL 212 - American Literature: Beginnings to 1900 **Credits: 3**
- ENGL 227 - Introduction to Legal Writing **Credits: 3**
- ENGL 265 - Law and Literature **Credits: 3**
- ENGL 310 - Public Speaking **Credits: 3**
- ENGL 321 - Persuasive Speech and Writing **Credits: 3**

History:

HIST 320 - History of England to 1688 **Credits: 3**
HIST 341 - American Revolution **Credits: 3**
HIST 342 - The Early Republic **Credits: 3**
HIST 346 - Recent United States History **Credits: 3**
HIST 475 - History of American Constitutionalism **Credits: 3**

Philosophy:

PHIL 101 - Critical Thinking **Credits: 3**
PHIL 122 - Contemporary Moral Issues **Credits: 3**
PHIL 130 - Introduction to Biomedical Ethics **Credits: 3**
PHIL 221 - Symbolic Logic I **Credits: 3**
PHIL 270 - Ethics and the Environment **Credits: 3**
PHIL 320 - Ethical Theory **Credits: 3**
PHIL 450 - Philosophy of Law **Credits: 3**

Political Science:

PLSC 358 - Judicial Process **Credits: 3**
PLSC 359 - Constitutional Law and Civil Liberties **Credits: 3**
PLSC 361 - Modern Political Thought **Credits: 3**
PLSC 405 - Sexuality and Law **Credits: 3**

Free Electives: 19-26

Total Degree Requirements: 120

Minor

Criminology Minor

(1)

Required Courses:

CRIM 101 - Crime and Justice Systems **Credits: 3 (2)**
CRIM 102 - Survey of Criminology **Credits: 3**
CRIM 401 - Contemporary Issues in Criminology **Credits: 3**
CRIM 403 - Dilemmas in Criminology and Criminal Justice **Credits: 3**
Two additional CRIM electives, one chosen from Controlled **Credits: 6**
Electives Group B and one from Group C (3, 4)

Total Minor Requirements: 18

(1) Must have formal Department of Criminology and Criminal Justice approval to be admitted to Criminology minor.

(2) Meets Liberal Studies Social Science requirement.

(3) For students in the Computer Science/Cyber Security program, CRIM 321 may be substituted for Group B elective.

(4) For students in the Computer Science/Cyber Security program, CRIM 323 may be substituted for Group C elective.

Cyber Security Minor

(1)

Required Courses:

COSC 108 - Introduction to Programming via Alice **Credits:** 3 (2)

or

COSC 110 - Problem Solving and Structured Programming **Credits:** 3

COSC 345 - Computer Networks **Credits:** 3 (3)

or

IFMG 352 - LAN Design and Installation **Credits:** 3 (3)

CRIM 101 - Crime and Justice Systems **Credits:** 3 (4)

or

CRIM 102 - Survey of Criminology **Credits:** 3 (4)

CRIM 321 - Cybersecurity and Loss Prevention **Credits:** 3

CRIM 323 - Cybersecurity and the Law **Credits:** 3

Total Minor Requirements: 18

(1) Computer Science/Cyber Security students are not eligible to take this minor; instead, they must take a Criminology minor.

(2) Computer science majors cannot count COSC 108 or COSC 110; instead, they must take one additional course from the following: CRIM 344, CRIM 354, CRIM 401.

(3) Computer science majors cannot count COSC 352 /IFMG 352. Computer science majors must take COSC 345.

(4) Criminology majors cannot count CRIM 101 or CRIM 102; instead, they must take one additional course from the following: COSC 341, COSC 356, COSC 362, COSC 427, COSC 429, COSC 432, COSC 454, COSC 482, IFMG 382. Students must select COSC 356 to receive NSTISSE 4011 Certification.

Certificate and Certification Programs

Criminal Justice Training

Website: www.iup.edu/crimjustice

The Criminal Justice Training Center (CJTC) provides high-quality education and training programs for the continuing professionalism of the criminal justice system. The CJTC is one of only 17 schools in the commonwealth certified to offer Act 120 training, a 919-hour program that qualifies graduates to be municipal police officers. The police academy is located at the Indiana campus at IUP and various satellite locations. The center also offers programs for in-service personnel in fulfillment of annual mandatory continuing education requirements and nonmandatory courses such as Basic and Advanced Accident Investigation, Perceptual Driving, and Instructor Development. Lethal Weapons Training, Act 235, provides the basic requirements and mandatory recertification for armed security personnel.

School Security Personnel Basic Training Program

Website: <https://www.iup.edu/crimjustice/>

IUP Criminal Justice Training Center specifically designed to satisfy the requirements for the PA Act 67 of 2019: School Safety and Security that extends for two years, followed by refreshers to stay current.

The School Security Personnel (SSP) Basic Training Program is a forty-hour (40) block of instruction designed for law enforcement officers and school safety professionals working in an educational environment with school administrators. The course provides tools for officers to build positive

relationships with both students and staff. The course is also beneficial for educational professionals dedicated to providing a safe learning environment and provides a more in-depth understanding of the role and functions of a SSP.

Accreditation by the Pennsylvania Commission on Crime and Delinquency (PCCD) is pending, with the first cohort slated for June 2020.

Admission to the SSP program requires a HS Diploma/GED, approval of the Director of IUP's Criminal Justice Training Center, and various clearances.

The 40-hour (pass/fail) program may be offered in person or on-line over a period of 5-6 weeks throughout the year. Successful completion requires students to pass unit quizzes and deliver a culminating presentation. Students will receive a certificate upon passing the program. A course representing the SSP program will appear on the student's IUP clock hour transcript which will serve as official confirmation of completion.

More details outlining the program's curriculum, fees, and required clearances will be outlined on the IUP Criminal Justice web page.

Culinary Arts

Website: www.iup.edu/culinary

Lynn A. Pike, Chair

The Department of Culinary Arts offers a five-semester Associate in Applied Science Degree in Culinary Arts. These distinctive programs combine hands-on learning experiences in the kitchen laboratory, instruction in fundamental culinary and baking and pastry theory, liberal studies coursework, and a paid externship in the industry to provide each student with the necessary skills and knowledge to begin a successful career in the field of culinary arts or baking and pastry arts. The program consists of the 16-month, competency-based culinary arts or baking and pastry arts curriculum, plus an additional 12 credits of Liberal Studies requirements.

This contemporary approach to learning enables students to achieve advanced levels of proficiency in culinary and/or baking and pastry techniques and business management skills combined with a basic foundation of liberal arts knowledge.

The Department of Culinary Arts also offers a 16-month, non-credit Certificate in Culinary Arts and a 16-month, non-credit Certificate in Baking and Pastry Arts. Both programs are accredited by the American Culinary Federation.

Graduates of the certificate program may elect to transfer 38 credits of course work toward a Bachelor of Science degree program in Hospitality Management, 32 credits toward a Bachelor of Science degree program in Nutrition, or 21 credits toward a Bachelor of Science degree program in Family and Consumer Science Education.

Associate in Applied Science

Baking and Pastry Arts, AAS

Website: www.iup.edu/culinary

Lynn A. Pike, Chair

The Department of Culinary Arts offers a five-semester Associate in Applied Science Degree in Culinary Arts and a five-semester associate in Applied Science in Baking and Pastry Arts. These distinctive programs combine hands-on learning experiences in the kitchen laboratory, instruction in fundamental culinary and baking and pastry theory, liberal studies coursework, and a paid externship in the industry to provide each student with the necessary skills and knowledge to begin a successful career in the field of culinary arts or baking and pastry arts. The program consists of the 16-month, competency-based culinary arts or baking and pastry arts curriculum, plus an additional 12 credits of Liberal Studies requirements.

This contemporary approach to learning enables students to achieve advanced levels of proficiency in culinary and/or baking and pastry techniques and business management skills combined with a basic foundation of liberal arts knowledge.

Liberal Studies: 21-22

As outlined in Liberal Studies Requirements with the following specifications:

Mathematics: 3

MATH 101 - Foundations of Mathematics **Credits: 3**
(1)

English: 3

ENGL 101 - Composition I **Credits: 3**

Natural Science: 3-4

Lab or Non-Lab Science

Social Science: 3

Humanities: 3

HIST 196 - Explorations in US History **Credits: 3**
HIST 197 - Explorations in European History **Credits: 3**
HIST 198 - Explorations in Global History **Credits: 3**
ENGL 121 - Humanities Literature **Credits: 3**
PHIL/RLST course

Liberal Studies Electives: 6

(2,3)

COSC 101 - Computer Literacy **Credits: 3**
or
IFMG 101 - Computer Literacy **Credits: 3**
FDNT 143 - Current Issues in Nutrition and Wellness **Credits: 3**

Major Baking and Pastry Arts:

Required Courses: 39

Completion of Baking and Pastry program coursework and externship

Total Degree Requirements: 60-61

- (1) CMGT 1200 is established as equivalent to MATH 101
- (2) CMGT 1301 established as equivalent to LS Electives FDNT 145
- (3) COMP 1000 and COMP 2000 are established as equivalent to COSC/IFMG 101

Culinary Arts, AAS

Website: www.iup.edu/culinary
Lynn A. Pike, Chair

The Department of Culinary Arts offers a five-semester Associate in Applied Science Degree in Culinary Arts and a five-semester associate in Applied Science in Baking and Pastry Arts. These distinctive programs combine hands-on learning experiences in the kitchen laboratory, instruction in fundamental culinary and baking and pastry theory, liberal studies coursework, and a paid externship in the industry to provide each student with the necessary skills and knowledge to begin a successful career in the field of culinary arts or baking and pastry arts. The program consists of the 16-month, competency-based culinary arts or baking and pastry arts curriculum, plus an additional 12 credits of Liberal Studies requirements.

This contemporary approach to learning enables students to achieve advanced levels of proficiency in culinary and/or baking and pastry techniques and business management skills combined with a basic foundation of liberal arts knowledge.

Liberal Studies: 21-22

As outlined in the Liberal Studies Requirements with the following specifications:

English:

ENGL 101 - Composition I **Credits: 3**

Mathematics:

MATH 101 - Foundations of Mathematics **Credits: 3 (1)**

Humanities: 3

HIST 196 - Explorations in US History **Credits: 3**

HIST 197 - Explorations in European History **Credits: 3**

HIST 198 - Explorations in Global History **Credits: 3**

or

ENGL 121 - Humanities Literature **Credits: 3**

or PHIL/RLST course

Natural Science: 3-4

Lab or Non-Lab Science

Social Science: 3

Liberal Studies Electives: 6

(2, 3)

COSC 101 - Computer Literacy **Credits: 3**

or

IFMG 101 - Computer Literacy **Credits: 3**

FDNT 145 - Personal Nutrition **Credits: 3**

Major Culinary Arts:

Required Courses: 39

Completion of Culinary Program Coursework and Externship 9 credits from the Culinary Program will articulate toward the Liberal Studies **requirement.**

The remaining 12-13cr will be completed in one additional semester at the Punxsutawney Regional Campus after successful completion of the Culinary Externship.

Total Degree Requirements: 60

- (1) CMGT 1200 is established as equivalent to MATH 101
- (2) CMGT 1301 and CKRY 2001 are established as equivalent to LS Elective FDNT 145
- (3) COMP 1000 and COMP 2000 are established as equivalent to COSC 101/IFMG 101

Certificate and Certification Programs

Baking and Pastry Certificate

Website: <https://www.iup.edu/culinary/programs/culinary-and-baking-and-pastry>

The Department of Culinary Arts also offers a 16-month, non-credit Certificate in Baking and Pastry. This program is accredited by the American Culinary Federation.

Culinary Arts Certificate

Website: <https://www.iup.edu/culinary/programs/culinary-arts>

The Department of Culinary Arts also offers a 16-month, non-credit Certificate in Culinary Arts. This program is accredited by the American Culinary Federation.

Employment and Labor Relations

Website: www.iup.edu/elr

David M. Piper, Chair

The Department of Employment and Labor Relations offers a graduate program within the College of Health and Human Services leading to the degree of master of arts in Human Resources and Employment and Labor Relations. The 36-credit program consists of a required core of 21 credits, including an elective thesis and elective course offerings totaling 15 credits. Internships are available and strongly encouraged.

The program is multidisciplinary, combining analytical and human relations skills with knowledge drawn from social sciences and business disciplines. The degree is designed to prepare professional employment and labor relations practitioners in public and private management, unions, neutral agencies, government agencies, and arbitration panels.

While the department does not offer course work leading to an undergraduate major or degree, it does offer several undergraduate courses that are open to students of any major or college.

Food and Nutrition

Website: www.iup.edu/foodnutrition

Stephanie Taylor-Davis, Chair

The Department of Food and Nutrition offers a bachelor of science degree program in nutrition with three tracks: Dietetics, Culinary Dietetics, and General Nutrition. Within the degree program, students select a Natural Science option determined by their academic preparation and career goals. This curriculum prepares students as professionals for a diversity of career opportunities in dietetics, food service, the food industry, food and nutrition research, and health care.

In addition, the department provides Liberal Studies courses that are available to all university students. These include FDNT 143, Current Issues in Nutrition and Wellness, a course that meets the Dimensions of Wellness requirement, and FDNT 145, Personal Nutrition, a Liberal Studies elective.

Bachelor of Science

Culinary Dietetics Track, Nutrition, BS

Students who complete the Culinary Dietetics Track meet the academic requirements as accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics. The Culinary Dietetics Track allows students to combine academic preparation in nutrition with extensive hand-on learning experiences in culinary arts by one of two routes:

Students who have completed a minimum of 28 credits toward the baccalaureate degree have the opportunity to enroll in the Culinary Arts program at the Punxsutawney Regional Campus, where the three-semester program (fall, spring, summer) will transfer into the Department of Food and Nutrition 32 credits, which apply to the bachelor of science degree. Students complete the culinary arts externship in the summer between the junior and senior years.

Students who earn a culinary certificate before admission to the Dietetics program will receive 32 credits toward the degree.

This track uniquely prepares graduates to incorporate healthy nutrition into classical cuisine, manage food service operations focused on nutrition needs, and integrate culinary arts into hospital, extended care, and school food service operations. Graduates qualify for admission to ACEND-accredited dietetic internships in pursuit of dietetic registration.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Dimensions of Wellness:

One of the following:

NURS 143 - Healthy People—Promoting Wellness **Credits: 3**

FDNT 143 - Current Issues in Nutrition and Wellness **Credits: 3**

Mathematics:

MATH 217 - Probability and Statistics **Credits: 3**

Natural Science:

CHEM 101 - College Chemistry I **Credits: 4**

CHEM 102 - College Chemistry II **Credits: 4**

Social Science:

ANTH 470 - Environmental Archaeology **Credits: 3**

or

PLSC 101 - World Politics **Credits: 3**

or

PLSC 111 - American Government **Credits: 3**

PSYC 101 - General Psychology **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

Liberal Studies Elective: 3

No courses with FDNT prefix (1)

Major: 30

Required Courses:

(2)

FDNT 110 - Careers in Food and Nutrition **Credits: 1**
FDNT 213 - Life Cycle Nutrition **Credits: 3**
FDNT 355 - Medical Nutrition Therapy I **Credits: 3**
FDNT 362 - Experimental Foods **Credits: 3**
FDNT 364 - Methods of Teaching Food and Nutrition **Credits: 3**
FDNT 402 - Community Nutrition **Credits: 3**
FDNT 430 - Professional Topics in Food and Nutrition **Credits: 3**
FDNT 455 - Medical Nutrition Therapy II **Credits: 3**
FDNT 458 - Advanced Human Nutrition **Credits: 4**
FDNT 463 - Nutrition Counseling **Credits: 3**
FDNT 484 - Senior Seminar **Credits: 1**

Other Requirements: 45

Certificate in Culinary Arts **Credits: 32 (1, 3)**

Natural Science Sequence: 13

BIOL 241 - Introductory Medical Microbiology **Credits: 4**

or

BIOL 270

BIOL 105 - Cell Biology **Credits: 3**

BIOL 155 - Human Physiology and Anatomy **Credits: 4**

CHEM 255 - Biochemistry for Health Sciences **Credits: 3**

Free Electives: 1

(4)

Total Degree Requirements: 120

(1) The culinary certificate includes a course in computer science (previously transferred as COSC 101), which is considered an additional 3cr toward Liberal Studies requirements, resulting in a total of 44cr in Liberal Studies.

(2) Students who complete their culinary certificate before completing CHEM 101 and CHEM 102 are also required to take FDNT 212.

(3) Completion of a culinary certificate is required for this degree.

(4) Because the culinary certificate includes considerable additional preparation in foods, the 32cr include numerous hours of work that can be considered free electives.

Dietetics Track, Nutrition, BS

Students who complete the Dietetics Track (Didactic Program in Dietetics) meet the academic requirements as accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics. This track prepares individuals to translate

food and nutrition science information for members of the larger community with respect to healthful food preparation, healthy eating behaviors, medical nutrition therapy, management of nutrition delivery and food service systems, and advocacy for the profession of dietetics. The individual who completes this program will exhibit an in-depth knowledge of food, nutrition, behavioral sciences, and management theory and be able to apply this knowledge to solve problems. Graduates qualify for admission to ACEND-accredited dietetic internships in pursuit of dietetic registration.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Dimensions of Wellness:

Mathematics:

MATH 217 - Probability and Statistics **Credits: 3**

Natural Science:

CHEM 101 - College Chemistry I **Credits: 4**

CHEM 102 - College Chemistry II **Credits: 4**

or

CHEM 111 - General Chemistry I **Credits: 4 (1)**

CHEM 112 - General Chemistry II **Credits: 4 (1)**

Social Science:

ECON 101 - Basic Economics **Credits: 3**

or

ECON 121 - Principles of Macroeconomics **Credits: 3**

PSYC 101 - General Psychology **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

Liberal Studies Elective: 3

No courses with FDNT prefix

Major: 25

Required Courses:

(1)

FDNT 110 - Careers in Food and Nutrition **Credits: 1**

FDNT 150 - Foods **Credits: 3**

FDNT 151 - Foods Laboratory **Credits: 1**

FDNT 212 - Nutrition **Credits: 3**

FDNT 213 - Life Cycle Nutrition **Credits: 3**

FDNT 355 - Medical Nutrition Therapy I **Credits: 3**

FDNT 362 - Experimental Foods **Credits: 3**

FDNT 458 - Advanced Human Nutrition **Credits: 4**

FDNT 470 - Human Food Consumption Patterns **Credits: 3**

FDNT 484 - Senior Seminar **Credits: 1**

Controlled Electives: 28

Dietetics Track:

FDNT 364 - Methods of Teaching Food and Nutrition **Credits: 3**
FDNT 402 - Community Nutrition **Credits: 3**
FDNT 430 - Professional Topics in Food and Nutrition **Credits: 3**
FDNT 455 - Medical Nutrition Therapy II **Credits: 3**
FDNT 463 - Nutrition Counseling **Credits: 3**
HOSP 256 - Human Resources in the Hospitality Industry **Credits: 3**
HOSP 259 - Hospitality Purchasing **Credits: 3**
HOSP 220 - Food Service Operations **Credits: 3**
MGMT 310 - Principles of Management **Credits: 3**

Other Requirements: 13

Natural Science Sequence: 13

BIOL 105 - Cell Biology **Credits: 3**
BIOL 155 - Human Physiology and Anatomy **Credits: 4**
BIOL 241 - Introductory Medical Microbiology **Credits: 4**
CHEM 255 - Biochemistry for Health Sciences **Credits: 3**

Free Electives: 10

Total Degree Requirements: 120

(1) CHEM 231 is also required if CHEM 111-CHEM 112 is taken and is added to major credits.

Nutrition Track, Nutrition, BS

The Nutrition Track provides flexibility and options for students based upon their career goals or plans for a graduate education, depending upon the minor or second major that is chosen. Students can personalize the track toward employment within the fitness industry, community nutrition and health education, food and nutrition management, or other specialty areas. Students who minor in exercise science are prepared to take certification examinations offered by professional organizations, including the American College of Sports Medicine and the National Strength and Conditioning Association, among others. Those who graduate in the Nutrition Track with a minor in exercise science are eligible for early admission to the master of science in exercise science and/or food and nutrition. Students who minor in community health are eligible to take the National Commission for Health Education Credentialing exam and be recognized as a Certified Health Education Specialist (CHES). Students in the Nutrition Track who complete Medical Nutrition Therapy I and II are eligible for employment with the Special Supplemental Nutrition Program for Women, Infants, and Children. Students who wish to pursue graduate education in nutrition or other natural science-related programs should work carefully with their advisor so that appropriate chemistry, biology, and nutrition electives are chosen. Students receive specific academic advisement regarding science and nutrition courses needed to progress to graduation, depending upon their career plans. Faculty advisors work across disciplines to effectively mentor students toward their educational and career goals. Students in the Nutrition Track may transfer to the Dietetics Track if their GPA is greater than or equal to a 3.0 and grades in science and food and nutrition courses are greater than or equal to a "C" or better. Students without these academic accomplishments are not competitive to receive a required post-graduate supervised practice experience to become a Registered Dietitian Nutritionist.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 217 - Probability and Statistics **Credits:** 3

Natural Science:

CHEM 101 - College Chemistry I **Credits:** 4

CHEM 102 - College Chemistry II **Credits:** 4

or

BIOL 104 - Human Biology: How the Human Body Works **Credits:** 4

BIOL 106 - Human Genetics and Health **Credits:** 3 (1)

Liberal Studies Elective: 3

No courses with FDNT prefix (2)

Major: 20

Required Courses:

(1)

FDNT 110 - Careers in Food and Nutrition **Credits:** 1

FDNT 150 - Foods **Credits:** 3

FDNT 151 - Foods Laboratory **Credits:** 1

FDNT 212 - Nutrition **Credits:** 3

FDNT 213 - Life Cycle Nutrition **Credits:** 3

FDNT 364 - Methods of Teaching Food and Nutrition **Credits:** 3 (3)

FDNT 402 - Community Nutrition **Credits:** 3

FDNT 493 - Internship **Credits:** 3-12

Controlled Electives: 27-30

Nutrition Track:

FDNT electives (200 level and above) **Credits:** 6-12 (4)

Program minor, certificate, or core concentration required for program completion **Credits:** 18-21 (5)

Free Electives: 23-32

Total Degree Requirements: 120

(1) Depending upon career goals, different chemistry and biology coursework may be needed in addition to the Natural Science Liberal Studies requirements. Students who desire to change to the dietetics track should select CHEM 101/CHEM 102.

(2) For the gerontology certificate, PSYC 378 can be applied as a Liberal Studies elective. For the business administration minor, ECON 122 can be applied as a Liberal Studies elective.

(3) FCSE 450 may be substituted, with permission of the Human Development, Fashion, and Interior Design department chairperson.

(4) Number of FDNT electives depends upon number of credits in the minor, certificate, or concentration. Students who choose the exercise science or community health minor must take FDNT 245 Sports Nutrition.

(5) Select one of the following:

Minor in anthropology, biochemistry, biology, biomedical sciences, business administration, chemistry, human development and family studies, communications media, community health, exercise science, global health, hospitality management, journalism and public relations, psychology, sociology, or sustainability studies. Other minors with Food and Nutrition department chairperson permission.

(6) Students who desire certification as a Certified Health Education Specialist (CHES) must also choose KHSS 341 and NURS 410.

Minor

Nutrition Minor

This minor is recommended for students majoring in related disciplines, such as nursing and allied health, pre-medical, pre-pharmacy, hospitality management, kinesiology, health, and sport science, child development and family relations, and family and consumer sciences education, and for students who have a personal, consumer-oriented interest in nutrition. Science prerequisites for the minor are, at a minimum, CHEM 101/CHEM 102 or BIOL 104/BIOL 106.

Required Courses: 6

FDNT 212 - Nutrition **Credits: 3**

FDNT 213 - Life Cycle Nutrition **Credits: 3**

Controlled Electives: 12-13

Four additional courses from the following list. Other FDNT courses may be selected but must be pre-approved by the department chair. Must meet any course prerequisites.

FDNT 150 - Foods **Credits: 3**

FDNT 245 - Sports Nutrition **Credits: 3**

FDNT 355 - Medical Nutrition Therapy I **Credits: 3**

FDNT 402 - Community Nutrition **Credits: 3**

FDNT 410 - Food, Nutrition, and Aging **Credits: 3**

FDNT 458 - Advanced Human Nutrition **Credits: 4**

FDNT 470 - Human Food Consumption Patterns **Credits: 3**

Total Minor Requirements: 18-19

Hospitality Management

Website: www.iup.edu/hospitality-mgt

Stephen B. Shiring, Chair

Hospitality Management graduates are successful, competent, and well prepared. They join the workforce with complete confidence as problem solvers to excel in the hospitality industry, a global service industry by applying the leadership and managerial skills they have learned and perfected as a result of their educational experiences at IUP. Management careers and exciting employment opportunities await either as being an entrepreneur or within the larger global operational systems, including corporate support centers, supply chain and logistics management, restaurants, tourism, special events, hotels, resorts, clubs and beverage operations, theme parks, contract food services, gaming operations, catering, cruise lines, and other travel-related venues and operations. The program is accredited by the Accreditation Commission for Programs in Hospitality Administration. Early admission to graduate programs (MA Human Resources and Employment Relations or MS in Sport Science) is an option available for hospitality management students who wish to earn graduate degrees.

Associate of Science

Hospitality Management, AS

Hospitality Management Associate graduates are successful, competent, and well prepared. Entry-level management careers and exciting employment opportunities await either as an entrepreneur or within the larger global operational systems, including corporate support centers, supply chain and logistics management, restaurants, tourism, special events, hotels, resorts, clubs and beverage operations, theme parks, contract food services, gaming operations, catering, cruise lines, and other travel-related venues and operations. The program is accredited by the Accreditation Commission for Programs in Hospitality Administration. Continuation in the Bachelor of Science Degree in Hospitality Management is encouraged.

Liberal Studies: 24

As outlined in the Liberal Studies Requirements section with the following specifications:

Learning Skills: 6

ENGL 101 - Composition I **Credits: 3**

MATH 101 - Foundations of Mathematics **Credits: 3 or higher**

Fine Arts: 3

Humanities: 9

HIST 196 - Explorations in US History **Credits: 3**

or

HIST 197 - Explorations in European History **Credits: 3**

or

HIST 198 - Explorations in Global History **Credits: 3**

ENGL 121 - Humanities Literature **Credits: 3**

Philosophy/Religious Studies:

Natural Science: 3

Non-Lab Science

Social Science: 3

ECON 101 - Basic Economics **Credits: 3**

or

ECON 121 - Principles of Macroeconomics **Credits: 3**

Hospitality Core: 36

HOSP 101 - Introduction to the Hospitality Industry **Credits: 1**

HOSP 130 - Food Service Sanitation **Credits: 1**

HOSP 150 - Principles of Hospitality Management **Credits: 3**

HOSP 220 - Food Service Operations **Credits: 3**

HOSP 256 - Human Resources in the Hospitality Industry **Credits: 3**

HOSP 259 - Hospitality Purchasing **Credits: 3**

HOSP 260 - Hotel Operations Management **Credits: 3**

HOSP 265 - Hospitality Cost Management **Credits: 3**

HOSP 310 - Professional Development in the Hospitality Industry **Credits: 3**

HOSP 320 - Hospitality Marketing **Credits: 3**

HOSP 330 - Applications of Food Production and Service **Credits: 4**

HOSP 335 - Legal Issues in Hospitality **Credits: 3**
HOSP 493 - Internship **Credits: 3**
HOSP 393 - Exploratory Hospitality Field Experience **Credits: 3-12**

Total Degree Requirements: 60

Bachelor of Science

Hospitality Management, BS

Liberal Studies: 43

As outlined in Liberal Studies Requirements section with the following specifications:

Mathematics:

MATH 217 - Probability and Statistics **Credits: 3**

Natural Science:

Option II

Social Science:

(1)

ECON 101 - Basic Economics **Credits: 3**

or

ECON 121 - Principles of Macroeconomics **Credits: 3**

Liberal Studies Elective: 3

No course with HOSP prefix

Major: 57

(1)

Required Courses:

HOSP 101 - Introduction to the Hospitality Industry **Credits: 1**
HOSP 150 - Principles of Hospitality Management **Credits: 3**
HOSP 220 - Food Service Operations **Credits: 3**
HOSP 256 - Human Resources in the Hospitality Industry **Credits: 3**
HOSP 259 - Hospitality Purchasing **Credits: 3**
HOSP 260 - Hotel Operations Management **Credits: 3**
HOSP 265 - Hospitality Cost Management **Credits: 3**
HOSP 310 - Professional Development in the Hospitality Industry **Credits: 3**
HOSP 320 - Hospitality Marketing **Credits: 3**
HOSP 330 - Applications of Food Production and Service **Credits: 4**

HOSP 335 - Legal Issues in Hospitality **Credits:** 3
HOSP 393 - Exploratory Hospitality Field Experience **Credits:** 3-12 (3)
HOSP 413 - Restaurant Food Production and Service **Credits:** 4
HOSP 470 - Hospitality Business Model **Credits:** 3
HOSP 494 - Internship **Credits:** 3-12 (3)

Controlled Electives: 12

One 12cr concentration required: (4)

Hotel and Lodging Concentration:

HOSP 325 - Hotel Sales **Credits:** 3
HOSP 372 - Housekeeping and Facilities Management **Credits:** 3
HOSP 400 - Hotel Revenue Management **Credits:** 3
One course of non-required HOSP prefix requirements **Credits:** 3

Special Events/Tourism Management Concentration

HOSP 235 - Tourism Management **Credits:** 3
HOSP 280 - Special Event Management **Credits:** 3
HOSP 347 - Meeting and Convention Management **Credits:** 3
One course of non-required HOSP prefix requirements **Credits:** 3

Other Requirements: 9-11

ACCT 201 - Accounting Principles I **Credits:** 3
FNLG XXX - Foreign Languages **Credits:** 6-8

Free Electives: 9-11

Total Degree Requirements: 120

- (1) ECON 121 is required for those students completing a Business Minor.
- (2) Department-specified kitchen food preparation uniform, knife kit, and proof of ServSafe certification are required for major lab courses.
- (3) Each student must complete a minimum of 120 hours in each of the two supervised internship experiences (HOSP 393 and HOSP 494). See department internship coordinator for detailed information.
- (4) Each student must complete one 12cr concentration, prior to applying for graduation.

Minor

Hospitality Management Minor

A minor in Hospitality Management prepares students with fundamental knowledge in the management of hospitality operations. Hospitality industry specific management skills in the areas of employee development, purchasing, managing and critiquing food production systems pertinent to the hospitality industry are the focus of this minor.

Required Courses:

HOSP 130 - Food Service Sanitation **Credits: 1**
HOSP 150 - Principles of Hospitality Management **Credits: 3**
HOSP 256 - Human Resources in the Hospitality Industry **Credits: 3**
HOSP 259 - Hospitality Purchasing **Credits: 3**
HOSP 300 - Critiquing Commercial Restaurants **Credits: 1**
HOSP 330 - Applications of Food Production and Service **Credits: 4**
HOSP Elective **Credits: 3 (1)**

Total Minor Requirements: 18

(1) Needs to be 300-level or higher

Hotel and Lodging Management Minor

The Hotel and Lodging Minor prepares students with industry specific skills required of today's hotel professional. Students will learn how to lead front office operations, housekeeping and facilities management, industry standard pricing strategies, revenue management, the role of a hotel sales department, and how to lead with a focus on service management.

Required Courses: 12

HOSP 260 - Hotel Operations Management **Credits: 3**
HOSP 325 - Hotel Sales **Credits: 3**
HOSP 372 - Housekeeping and Facilities Management **Credits: 3**
HOSP 400 - Hotel Revenue Management **Credits: 3**

Controlled Electives: 6

HOSP courses approved by department chair totaling at least 6cr

Total Minor Requirements: 18

Restaurant and Food Service Management Minor

The Restaurant and Food Service Management Minor prepares students with the skills to be a successful food service manager. This minor prepares students to manage and operate a food production system by developing skills in food sanitation, food preparation skills, menu planning, front and back of the house operations, and responsible alcohol service.

Required Courses:

HOSP 130 - Food Service Sanitation **Credits: 1**
HOSP 220 - Food Service Operations **Credits: 3**
HOSP 330 - Applications of Food Production and Service **Credits: 4 (1, 2)**
HOSP 402 - Beverage Management **Credits: 3**
HOSP 403 - Wine and Wine Service **Credits: 3**
HOSP 413 - Restaurant Food Production and Service **Credits: 4 (1, 2)**

Total Minor Requirements: 18

(1) Department-specified kitchen food preparation uniform and knife kit are required for lab courses.

(2) Students are required to show proof of approved safe food handling certification.

Special Event/Tourism Management Minor

The Special Event/Tourism Management Minor introduces students to the planning, organizing, influencing, and controlling of special event functions and the social, cultural, environmental and economic processes linked to the tourism industry. This minor provides the option to select industry specific courses that meet their individual career goals in areas of professional wedding planning, fund-raising, catering, festivals, destination management, international tourism, and event management.

Required Courses: 9

HOSP 235 - Tourism Management **Credits: 3**
HOSP 280 - Special Event Management **Credits: 3**
HOSP 347 - Meeting and Convention Management **Credits: 3**

Controlled Electives: 9

HOSP courses approved by department chair totaling at least 9cr with at least 3cr being 300 level or higher.

Total Minor Requirements: 18

Human Development, Fashion, and Interior Design

Website: www.iup.edu/hdes

Karen M. Scarton, Chair

The Department of Human Development, Fashion, and Interior Design was created by the merging of the Family and Consumer Sciences Education and Consumer Services departments. The mission statement of the department is to empower individuals to support human and environmental needs, enabling them to perform professionally in a changing, diverse technological and global society.

The department is composed of majors that are interdisciplinary and share humanistic values. All majors have an applied research focus and stress critical thinking, professional judgment, decision making, and synthesis of information with direct focus on career paths.

The department offers academic programs leading to the bachelor of science degree with the following majors: human development and family science, fashion merchandising, and interior design. The K-12 Family and Consumer Sciences Education program leads to a bachelor of science in education. These majors prepare men and women for positions in business, the community, and education. The majors also prepare students for graduate study in the areas of interior design, housing, clothing, textiles, consumer economics, human service, child development, family studies, or education.

Faculty advisors work closely with students in planning and integrating the academic program to meet the students' career goals and to supplement classroom experiences. Internships are available and encouraged so students can apply academic knowledge to actual situations. International study is also available to provide an enriching cultural experience.

Bachelor of Science

Fashion Merchandising, BS

The Fashion Merchandising program provides course emphasis in clothing and human behavior, apparel production and analysis, textiles and quality control, apparel distribution, merchandising and promotion, global diversity, historic textiles and apparel, color and aesthetics, and apparel construction. Communications, problem solving, group project organization, professional presentation, and analytical and critical thinking skills are incorporated in course content. The Eberly College of Business and Information Technology complements this major by providing study in one of three options: business administration, marketing, and small business management. A cooperative program between IUP and the Fashion Institute of Technology in New York City allows students to study either Fashion or Accessories Design.

Graduates of this program are being prepared for entry-level positions such as a manufacturer's sales representative, production assistant, ready-to-wear quality control analyst, textile testing laboratory technician, management trainee leading to position of store manager, executive/merchandising trainee leading toward position of buyer/merchandise manager, museum curator assistant, personal color consultant, fashion entrepreneur, and personalized shopping specialist for an upscale retail firm.

Liberal Studies: 46-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 105 - College Algebra **Credits:** 3

or

MATH 217 - Probability and Statistics **Credits:** 3 (1)

Social Science:

ECON 121 - Principles of Macroeconomics **Credits:** 3

PSYC 101 - General Psychology **Credits:** 3

GEOG 104 - World Geography: Global Context **Credits:** 3

or

ANTH 110 - Contemporary Anthropology **Credits:** 3

or

ANTH 211 - Cultural Anthropology **Credits:** 3

Liberal Studies Electives: 6

COSC 101 - Computer Literacy **Credits:** 3

or

IFMG 101 - Computer Literacy **Credits:** 3

or

IFMG 110 - Business Spreadsheet Computing **Credits:** 3

ECON 122 - Principles of Microeconomics **Credits:** 3

No course with FSMR prefix

Major: 30

Required Courses:

FSMR 112 - Fundamentals of Clothing Construction **Credits:** 3

FSMR 180 - Introduction to Fashion **Credits:** 3

FSMR 215 - Textiles **Credits:** 3

FSMR 280 - Introduction to Apparel Buying **Credits:** 3

FSMR 357 - Global Issues in Textiles and Apparel **Credits:** 3

FSMR 380 - Applications in Apparel Buying **Credits:** 3

FSMR 385 - Ready-to-Wear Analysis **Credits:** 3

FSMR 434 - Quality Control in Textiles **Credits:** 3

FSMR 456 - Historic Costume **Credits:** 3

FSMR 480 - Professional Development in the Fashion Industry **Credits:** 3

Controlled Electives: 9

Three courses from the following:

FSMR 158 - Fashion Show Production **Credits:** 3
FSMR 252 - Aesthetics of Fashion **Credits:** 3
FSMR 258 - Fashion Brand Merchandising **Credits:** 3
FSMR 262 - Fashion Forecasting **Credits:** 3
FSMR 281 - Special Topics **Credits:** 1-3
FSMR 303 - Visual Merchandising **Credits:** 3
FSMR 468 - Supply Chain Management in Textiles and Apparel **Credits:** 3
FSMR 481 - Special Topics **Credits:** 1-3
FSMR 482 - Independent Study **Credits:** 1-3

Additional Requirements: 21-24

Required Courses:

Complete courses in one of the following options:

Option 1: Business Administration Minor: 24

Note: Students must meet all minor requirements listed in catalog.

JRNL 120 - Journalistic Techniques for Professional Writing **Credits:** 3
or
ENGL 310 - Public Speaking **Credits:** 3

Business Administration Minor Requirements (21)

ACCT 201 - Accounting Principles I **Credits:** 3
ACCT 202 - Accounting Principles II **Credits:** 3
FIN 310 - Fundamentals of Finance **Credits:** 3
MGMT 310 - Principles of Management **Credits:** 3
MKTG 320 - Principles of Marketing **Credits:** 3

Two Courses from

BCOM 321 - Business and Interpersonal Communications **Credits:** 3
BLAW 235 - Legal Environment of Business **Credits:** 3
IFMG 300 - Information Systems: Theory and Practice **Credits:** 3
MGMT 330 - Production and Operations Management **Credits:** 3 (2)

Option 2: Marketing

Marketing Track (21)

ACCT 201 - Accounting Principles I **Credits:** 3
JRNL 120 - Journalistic Techniques for Professional Writing **Credits:** 3
or
BCOM 321 - Business and Interpersonal Communications **Credits:** 3
or
ENGL 310 - Public Speaking **Credits:** 3

Marketing Track Requirements (15):

MKTG 320 - Principles of Marketing **Credits:** 3
MKTG 321 - Consumer Behavior **Credits:** 3

Three 3cr 400-level MKTG courses

Marketing Minor (24)

ACCT 201 - Accounting Principles I **Credits: 3**

JRNL 120 - Journalistic Techniques for Professional Writing **Credits: 3**

or

BCOM 321 - Business and Interpersonal Communications **Credits: 3**

or

ENGL 310 - Public Speaking **Credits: 3**

Marketing Minor Requirements (18):

MKTG 320 - Principles of Marketing **Credits: 3**

MKTG 321 - Consumer Behavior **Credits: 3**

Four 3cr 400-level MKTG courses

Option 3: Small Business Management Track: 21

ACCT 201 - Accounting Principles I **Credits: 3**

JRNL 120 - Journalistic Techniques for Professional Writing **Credits: 3**

or

BCOM 321 - Business and Interpersonal Communications **Credits: 3**

or

ENGL 310 - Public Speaking **Credits: 3**

MKTG 320 - Principles of Marketing **Credits: 3**

Small Business Management Requirements:

MGMT 275 - Introduction to Entrepreneurship **Credits: 3**

MGMT 325 - Small Business Management **Credits: 3 (3)**

Two Courses from

MGMT 300 - Human Resource Management **Credits: 3**

MGMT 310 - Principles of Management **Credits: 3**

MGMT 350 - International Business **Credits: 3**

MGMT 403 - Small Business Planning **Credits: 3 (4)**

Free Electives: 9-14

Total Degree Requirements: 120

(1) Student should take MATH 105 (the prerequisite for MATH 115) instead of MATH 217 for their LS requirement if they wish to pursue a double major in a business subject or take MGMT 330 for a Business Administration minor.

(2) Student will need to take MATH 115, MATH 214, and be junior standing to take MGMT 330.

(3) Prerequisites to be waived.

(4) Student will need to take ACCT 202 and 300 in order to take MGMT 403.

Human Development and Family Science, BS

The Human Development and Family Science program leads to a bachelor of science degree. Primary objectives of the program are to prepare professionals to work in, or supervise, human service agencies that serve children, youth, and/or families. The program also provides preparation for students who want to pursue graduate study in applied programs such as social work, counseling, or education. Students who major in Human Development and Family Science must maintain a 2.0 major GPA to graduate from the program.

The CDFR minor, consisting of 18 credits, is for students who desire to work in programs that entail all aspects of child development and family relationships and administration in human service agencies at federal, state, and local levels, but who have their major coursework in a related field. The INDIANA UNIVERSITY OF PENNSYLVANIA UNDERGRADUATE CATALOG, 2018-19 Page 11 CDFR minor is appropriate for all majors who wish to pursue careers working with children and families. The minor includes two required courses and any combination of four additional courses, including at least one 400-level course, with a CDFR prefix from the list provided.

Liberal Studies: 46-47

As outlined in Liberal Studies Requirements section with the following specifications:

Mathematics: 3

Social Science:

ANTH 110 - Contemporary Anthropology **Credits: 3** or any global or multicultural social science course

PSYC 101 - General Psychology **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

Liberal Studies Electives: 6

FCSE 315 - Consumer Economics and Family Finance **Credits: 3**

FDNT 145 - Personal Nutrition **Credits: 3**

No courses with CDFR prefix

Major: 46-47

Required Courses:

CDFR 218 - Child Development **Credits: 3**

CDFR 224 - Marriage and Family Relations **Credits: 3**

CDFR 310 - Child Observation and Assessment **Credits: 3**

CDFR 321 - Preschool Education: Play and Developmentally Appropriate Practices **Credits: 3**

CDFR 323 - Family Issues **Credits: 3**

CDFR 410 - Infant and Toddler Development **Credits: 3**

CDFR 411 - Family and Community **Credits: 3**

CDFR 425 - Adolescence: Risk and Resiliency **Credits: 3**

CDFR 426 - Techniques of Parent Education **Credits: 3**

CDFR 427 - Administration of Human Service Programs **Credits: 3**

CDFR 428 - Family Dynamics **Credits: 3**

CDFR 429 - Teaching in Community Settings **Credits: 3**

One CDFR Elective course **Credits: 3**

SOC 428 - Child Abuse **Credits: 3**

Other Requirements: 3-4

Outside Courses:

NURS 202 - Foundations of Child Health **Credits: 3**

or

BIOL 150 - Human Anatomy **Credits: 4**

Free Electives: 26-28

(1)

Three Optional Concentrations:

Early Intervention 18

CDFR 315 - Introduction to Early Intervention **Credits: 3**

EDEX 111 - Introduction to Exceptional Persons **Credits: 3**

EDEX 415 - Preschool Education for Children with Disabilities **Credits: 3**

EDEX 460 - Family Perspectives on Disability **Credits: 3**

KHSS 209 - Motor Behavior **Credits: 3**

KHSS 370 - Adapted Health and Physical Education **Credits: 3**

Infant/Toddler Mental Health 15

CDFR 315 - Introduction to Early Intervention **Credits: 3**

CDFR 420 - Infant Toddler Mental Health **Credits: 3** (2)

CDFR 430 - Poverty and Human Development **Credits: 3**

EDEX 111 - Introduction to Exceptional Persons **Credits: 3**

EDEX 460 - Family Perspectives on Disability **Credits: 3**

Youth and Families 15

CDFR 430 - Poverty and Human Development **Credits: 3**

or

CDFR 481 - Special Topics **Credits: 1-3**

EDEX 460 - Family Perspectives on Disability **Credits: 3**

FCSE 350 - Teaching Family Life Education **Credits: 3**

KHSS 417 - Contemporary Issues in School and Community Health **Credits: 3**

PSYC 312 - Adult Development and Aging **Credits: 3**

Total Degree Requirements: 120

(1) Students are encouraged to declare a minor **or** complete one of three concentrations or fulfill the requirements for National Council for Family Relations Certificate Family Life Educator certificate. An internship can be completed with any one of the above options.

(2) CDFR 420 can count as either a core course or as part of the concentration, but not in both places.

Interior Design, BS

The Interior Design program offers students opportunities in analyzing problems, synthesizing information, and implementing design solutions supportive of the needs of people and the environment. The program emphasizes creative problem solving through interdisciplinary experiences and communicating solutions. It enables graduates to adapt to a changing world by drawing on history while applying the principles of informed design and research. This program is accredited by the National Association of Schools of Art and Design.

The core of the program includes courses addressing space planning, hand drafting, design graphics and presentation techniques, color theory, building systems, materials and finishes, human factors, computer-aided drafting techniques, history of design, 3-D design, textiles, lighting, residential and commercial design, and professional practice. Detailed information is available from instructors regarding equipment and supplies to be purchased by students for individual courses in this program. Internships present an excellent opportunity for students to gain practical, on-the-job training and are highly recommended. Experiential learning opportunities in the community augment the program. Students tour a variety of settings including offices, museums, factories, showrooms, retail outlets, and construction sites. Supportive courses are offered in art, theater, communications media, and business. Graduates are prepared for entry-level positions in commercial and residential design, sales, historical preservation, kitchen and bath design, and showroom management.

Liberal Studies: 46-48

As outlined in the Liberal Studies Requirements with the following specifications:

Fine Arts:

ARHI 205 - Ancient to Medieval Art **Credits:** 3 recommended

Mathematics:

MATH 101 - Foundations of Mathematics **Credits:** 3 or higher

Natural Science:

Option I or Option II

Option I:

SCI 105 - Physical Science I **Credits:** 4

SCI 107 - Chemistry for Everyone **Credits:** 3

and

SCI 117 - Chemistry for Everyone Laboratory **Credits:** 1

Option II:

SCI 105 - Physical Science I **Credits:** 4

SCI 107 - Chemistry for Everyone **Credits:** 3

Social Science:

PSYC 101 - General Psychology **Credits:** 3

SOC 151 - Principles of Sociology **Credits:** 3

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits:** 3

Global and Multicultural Awareness course

Liberal Studies Electives: 6

ARHI 207 - Renaissance through Modern Art **Credits:** 3

ECON 122 - Principles of Microeconomics **Credits:** 3

No courses with INDS prefix

Major: 54

Required Courses:

INDS 105 - Introduction to Interior Design **Credits: 3**
INDS 110 - Color and Light **Credits: 3**
INDS 118 - Interior Design Graphics **Credits: 3**
INDS 210 - Human Factors in Interior Design **Credits: 3**
INDS 218 - Computer Technology for Interior Design **Credits: 3**
INDS 219 - Kitchen and Bath Design **Credits: 3**
INDS 230 - Presentation for Interior Design **Credits: 3**
INDS 240 - Three-Dimensional Design for Interior Design **Credits: 3**
INDS 313 - Building Systems I: Materials and Finishes **Credits: 3**
INDS 315 - Residential Design Studio **Credits: 3**
INDS 323 - Building Systems II: Mechanicals **Credits: 3**
INDS 370 - History of Interior Design and Architecture I **Credits: 3**
INDS 380 - History of Interior Design and Architecture II **Credits: 3**
INDS 405 - Interior Design Professional Practice **Credits: 3**
INDS 460 - Portfolio **Credits: 3**
INDS 464 - Commercial Design Studio I **Credits: 3**
INDS 465 - Commercial Design Studio II **Credits: 3**
INDS 470 - Interior Design Capstone **Credits: 3**

Other Requirements: 15

Outside Concentration:

Business: 6

BCOM 321 - Business and Interpersonal Communications **Credits: 3**
MKTG 320 - Principles of Marketing **Credits: 3**

Art: 9

ART 114 - Color and Two-Dimensional Design **Credits: 3**

Two Courses from the Following:

ART 213 - Woodworking: Function and Form **Credits: 3**
ART 214 - Ceramics **Credits: 3**
ART 215 - Sculpture **Credits: 3**
ART 216 - Jewelry and Metals **Credits: 3**
ART 218 - Introduction to Graphic Design **Credits: 3**
COMM 271 - Beginning Photography **Credits: 3**
COMM 371 - Advanced Photography **Credits: 3**
COMM 471 - Advanced Image Editing **Credits: 3**
THTR 116 - Fundamentals of Theatrical Design **Credits: 3**
THTR 120 - Stagecraft **Credits: 3**
THTR 221 - Basic Stage Lighting **Credits: 3**
THTR 320 - Scene Design **Credits: 3**
THTR 321 - Stage Lighting Design **Credits: 3**
THTR 489 - Design/Technology/Management Studio **Credits: 3**

Free Electives: 3-5

(1)

Total Degree Requirements: 120

(1) Students are encouraged to complete an internship.

Bachelor of Science in Education

Family and Consumer Sciences Education K-12, BSED

The K-12 Family and Consumer Sciences Education program prepares students for the teaching of family and consumer sciences-related subjects in the public schools. Course work is required in all areas of family and consumer services, including child development and family relations, consumer economics, clothing, foods, and interior design. Professional education courses also are required.

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 151 - Elements of Mathematics I **Credits: 3**

Natural Science:

BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**

BIOL 105 - Cell Biology **Credits: 3**

BIOL 106 - Human Genetics and Health **Credits: 3**

or

CHEM 101 - College Chemistry I **Credits: 4**

CHEM 102 - College Chemistry II **Credits: 4**

or

CHEM 111 - General Chemistry I **Credits: 4**

CHEM 112 - General Chemistry II **Credits: 4**

Social Science:

PSYC 101 - General Psychology **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

ANTH 110 - Contemporary Anthropology **Credits: 3**

or

Any global or multicultural social science

Liberal Studies Electives: 6

CDFR 218 - Child Development **Credits: 3**
MATH 152 - Elements of Mathematics II **Credits: 3**
No courses with FCSE prefix

College: 34

Preprofessional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits: 3**
EDSP 102 - Educational Psychology **Credits: 3**

Professional Education Sequence:

EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits: 2**
EDEX 323 - Instruction of English Language Learners with Special Needs **Credits: 2**
EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**
EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**
EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**
EDUC 441 - Student Teaching **Credits: 5-12**
EDUC 442 - School Law **Credits: 1**
FCSE 350 - Teaching Family Life Education **Credits: 3**
FCSE 450 - Teaching Vocational and Family Consumer Science Education **Credits: 3**

Major: 28

Required Courses:

CDFR 224 - Marriage and Family Relations **Credits: 3**
CDFR 321 - Preschool Education: Play and Developmentally Appropriate Practices **Credits: 3**
CDFR 429 - Teaching in Community Settings **Credits: 3**
FCSE 315 - Consumer Economics and Family Finance **Credits: 3**
FDNT 150 - Foods **Credits: 3**
FDNT 151 - Foods Laboratory **Credits: 1**
FDNT 212 - Nutrition **Credits: 3**
FSMR 112 - Fundamentals of Clothing Construction **Credits: 3**
FSMR 215 - Textiles **Credits: 3**
INDS 105 - Introduction to Interior Design **Credits: 3**

Free Electives: 11

(#) Total Degree Requirements: 120

(*) See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

(#) See advisory paragraph "Timely Completion of Degree Requirements" in the section on Requirements for Graduation.

Minor

Child Development and Family Relations Minor

IUP students who major or minor in CDFR must earn a "C" grade or better in CDFR 218 and CDFR 224 and maintain a 2.0 GPA in major courses to graduate from the CDFR program.

The CDFR minor, consisting of 18 credits, is for students who desire to work in programs that entail all aspects of child development and family relationships and administration in human service agencies at federal, state, and local levels but who have their major course work in a related field. The CDFR minor is appropriate for all majors who wish to pursue careers working with children and families. The minor includes two required courses and any combination of four additional courses, including at least one 400-level course, with a CDFR prefix from the list provided.

Required Courses:

- CDFR 218 - Child Development **Credits: 3**
- CDFR 224 - Marriage and Family Relations **Credits: 3**

Four Courses from the Following

Four courses from the following (at least one must be at the 400 level), meeting prerequisites:

- CDFR 310 - Child Observation and Assessment **Credits: 3**
- CDFR 315 - Introduction to Early Intervention **Credits: 3**
- CDFR 321 - Preschool Education: Play and Developmentally Appropriate Practices **Credits: 3**
- CDFR 322 - Early Care and Education **Credits: 3**
- CDFR 323 - Family Issues **Credits: 3**
- CDFR 411 - Family and Community **Credits: 3**
- CDFR 425 - Adolescence: Risk and Resiliency **Credits: 3**
- CDFR 426 - Techniques of Parent Education **Credits: 3**
- CDFR 427 - Administration of Human Service Programs **Credits: 3**

Total Minor Requirements: 18

Family and Consumer Science Minor

Required Courses: 18

- CDFR 218 - Child Development **Credits: 3**
- CDFR 224 - Marriage and Family Relations **Credits: 3**
- FCSE 315 - Consumer Economics and Family Finance **Credits: 3**
- FSMR 112 - Fundamentals of Clothing Construction **Credits: 3**
- or
- FSMR 180 - Introduction to Fashion **Credits: 3**
- INDS 105 - Introduction to Interior Design **Credits: 3**

Controlled Elective: 3

Any 300 or 400 level course in CDFR, INDS, FCSE, FDNT, or FSMR (1)

Total Minor Requirements: 18

(1) Prerequisites and/or instructor permission may be required.

Kinesiology, Health, and Sport Science

Website: www.iup.edu/kines

Joshua Castle, Chair

The Department of Kinesiology, Health, and Sport Science provides the following services:

Instruction in health and wellness courses as part of the university's Liberal Studies requirement

Instruction in health and physical education courses as physical education course electives

An undergraduate program in health and physical education that leads to the bachelor of science in education degree with three programs of study: Teacher Education with potential to earn certification to teach in the Commonwealth of Pennsylvania, Community Health Education, and Recreation and Leisure Studies.

Bachelor of science program in physical education and sport, which includes programs in exercise science, pre-athletic training, and sport administration

Bachelor of science degree program in athletic training

Certification program in driver education

Required Program—Liberal Studies

The department, through its Health and Wellness course in the Liberal Studies program, seeks to enhance the overall well-being of students through instruction planned to promote and maintain desirable levels of physical, mental, emotional, and social well-being. Self-responsibility in the following dimensions of wellness is emphasized: nutritional awareness, stress awareness and management, exercise and fitness, substance use and abuse, and sexually transmitted diseases/AIDS. The importance of reducing risk factors for chronic degenerative disease and managing lifestyle factors for promotion of health is presented with implications for both the present and future. Information is provided during class lectures and enhanced by a variety of practical learning experiences that give students opportunities for self-assessment and personal application of the subject matter.

In addition, the department offers a variety of 1-credit activity courses focusing on physical fitness and the development of skills essential for recreation and lifetime sports. Instruction may be offered in activities such as golf, resistive exercise, scuba, swimming, and tennis.

The university's Liberal Studies requirements require that each student successfully complete KHSS 143 or its alternates, FDNT 143 or NURS 143. Students may also elect to take 4 credits of the ROTC program (MLSC 101-MLSC 102) as an alternate to the wellness courses. Activity courses will continue to be offered, although they are no longer required. It is encouraged and recommended that students choose these courses as elective credits.

Bachelor of Science

Exercise Science Track, Physical Education and Sport, BS

IUP's Exercise Science program is accredited by the Committee on Accreditation for the Exercise Sciences under the auspices of the Commission on Accreditation of Allied Health Education Programs. This program provides students with the knowledge, skills, and abilities to seek employment in private and commercial fitness clubs, medical fitness facilities, sport-specific and conditioning facilities, and clinical settings such as cardiac and pulmonary rehabilitation programs. This program has an academic core, specialty classes in exercise assessment, programming, and prescription, and opportunities for worksite experience.

While students may select Exercise Science is one of several tracks in the Kinesiology, Health, and Sport Science Department, students must demonstrate above-average academic performance by maintaining programmatic standards including (1) minimum 2.5 cumulative GPA for transfer students outside and within IUP; (2) a minimum of a "C" grade in major/core exercise science classes, including KHSS 221 or BIOL 150, KHSS 285, KHSS 286, KHSS 343, KHSS 347, KHSS 375, KHSS 410, KHSS 411, KHSS 413, KHSS 414, KHSS 415, KHSS 416, KHSS 492, and KHSS 493; and (3) before graduation, successful completion of an NCCA (National Commission for Certifying Agencies) approved health and fitness certification. Student transcripts will be reviewed each semester by the individual academic advisor and reported to the Exercise Science program coordinator for compliance with the academic requirements. Specific work-site experiences may be contingent upon students' obtaining student liability insurance and selected health clearances such as physical, TB, and drug screening. Purchase of small equipment such as stethoscopes and digital heart rate monitors will be required.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 217 - Probability and Statistics **Credits: 3**

Natural Science:

BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**

BIOL 106 - Human Genetics and Health **Credits: 3**

BIOL 116 - Human Genetics and Health Laboratory **Credits: 1**

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 3

FDNT 145 - Personal Nutrition **Credits: 3**

Major: 57-58

Exercise Science Requirements: 50

BIOL 240 - Human Physiology **Credits: 4**

KHSS 146 - Foundations of Exercise Science **Credits: 1**

KHSS 175 - Prevention and Care of Injuries to the Physically Active **Credits: 2**

KHSS 209 - Motor Behavior **Credits: 3**

KHSS 221 - Human Structure and Function **Credits: 3**

or

BIOL 150 - Human Anatomy **Credits: 4**

KHSS 285 - Group/Individual Exercise Leadership **Credits: 3**

KHSS 286 - Personal Training Practicum **Credits: 3**

KHSS 287 - Aquatic Fitness Instruction **Credits: 1**

KHSS 315 - Biomechanics **Credits: 3**

KHSS 343 - Physiology of Exercise **Credits: 3**

KHSS 344 - Adapted Physical Activity and Sport **Credits: 3**

KHSS 347 - Physiology of Exercise Laboratory **Credits: 1**

KHSS 375 - Physiological Basis of Strength Training and Conditioning **Credits: 3**

KHSS 410 - Exercise Prescription **Credits: 3**

KHSS 411 - Physical Fitness Appraisal **Credits: 3**

KHSS 413 - Wellness Coaching for Lifestyle Behavior Management **Credits: 3**

KHSS 414 - Exercise Electrocardiography **Credits: 3**

or

KHSS 416 - Functional Training for Strength and Conditioning **Credits: 3**

KHSS 415 - Lifestyle Behavior Management for Physical Activity **Credits: 3**

KHSS 492 - Senior Capstone in Exercise Science **Credits: 3**

KHSS 493 - Internship **Credits:** 1-12

Controlled Electives: 2-3

BIOL 200 - Medical Terminology **Credits:** 2

KHSS 292 - Introduction to Sport Management **Credits:** 3

KHSS 373 - Business Administration in the Fitness Industry **Credits:** 3

KHSS 436 - Corrective Exercise for the Health and Fitness Practitioner **Credits:** 3

KHSS 493 - Internship **Credits:** 1-12

(addition to 6cr)

Total Degree Requirements: 120

Free Electives: 15-17

Pre-athletic Training Track, Physical Education and Sport, BS

The Pre-Athletic Training Track prepares students for admission into a professional-level masters degree program in Athletic Training. Accelerated program progression allows students who meet eligibility requirements to apply for early admission into IUP's Master of Science program in Athletic Training program. Students will work closely with an advisor to ascertain the likelihood of early admission into graduate school and will be advised to switch into another PESP Track if appropriate. The first four semesters of the Pre-Athletic Training Track align closely with the Exercise Science Track and allows for seamless transition into Exercise Science if early admission requirements are not likely to be met by the end of the sixth semester. The masters degree in athletic training will be implemented beginning Summer 2020.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 217 - Probability and Statistics **Credits:** 3

Natural Science:

BIOL 104 - Human Biology: How the Human Body Works **Credits:** 4

BIOL 106 - Human Genetics and Health **Credits:** 3

BIOL 116 - Human Genetics and Health Laboratory **Credits:** 1

Social Science:

PSYC 101 - General Psychology **Credits:** 3

Liberal Studies Elective: 3

FDNT 145 - Personal Nutrition **Credits:** 3

Major: 21

Core Requirements:

KHSS 135 - Careers in Kinesiology, Health, and Sport **Credits: 1**
KHSS 175 - Prevention and Care of Injuries to the Physically Active **Credits: 2**
KHSS 209 - Motor Behavior **Credits: 3**
KHSS 221 - Human Structure and Function **Credits: 3**
KHSS 341 - Evaluations and Analytics in Kinesiology **Credits: 3**
KHSS 343 - Physiology of Exercise **Credits: 3**
KHSS 344 - Adapted Physical Activity and Sport **Credits: 3**
KHSS 441 - Psychosocial Implications for Health and Physical Education **Credits: 3**

Pre-Athletic Training Requirements: 28

BIOL 150 - Human Anatomy **Credits: 4**
BIOL 200 - Medical Terminology **Credits: 2**
BIOL 240 - Human Physiology **Credits: 4**
CHEM 101 - College Chemistry I **Credits: 4**
KHSS 286 - Personal Training Practicum **Credits: 3**
KHSS 315 - Biomechanics **Credits: 3**
KHSS 347 - Physiology of Exercise Laboratory **Credits: 1**
KHSS 375 - Physiological Basis of Strength Training and Conditioning **Credits: 3**
PHYS 111 - Physics I Lecture **Credits: 3**
or
PHYS 151 - Medical Physics Lecture **Credits: 3**
PHYS 121 - Physics I Lab **Credits: 1**
or
PHYS 161 - Medical Physics Lab **Credits: 1**

Free Electives: 27

(1)

Total Degree Requirements: 120

(1) Some elective credits can be used towards the MS degree program in Athletic Training if eligible for early admission.

Sport Administration Track, Physical Education and Sport, BS

This program prepares students to use a variety of skills to function in a management capacity within the sport industry. Graduates of this program can seek employment in such areas as school and college athletic departments, coaching, community recreation organizations, minor and major league sports franchises, commercial sport facilities, and golf courses, as well as other athletic and sports-related industries. Students acquire management skills that can be used in multiple career tracks. A minor that will enhance their career objectives is encouraged.

Students are required to earn a "C" or better in KHSS 292 in order to take KHSS 351, KHSS 445, KHSS 460, and KHSS 465. Students wishing to change majors into Sport Administration must earn a "C" or better grade in KHSS 292 and have a CGPA above 2.25.

Liberal Studies: 47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 217 - Probability and Statistics **Credits: 3**

Natural Science:

Option I

BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**

One 3cr laboratory course

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

ECON 121 - Principles of Macroeconomics **Credits: 3**

PSYC 101 - General Psychology **Credits: 3**

Global and Multicultural Awareness course

Dimensions of Wellness:

One of the following recommended

KHSS 143 - Wellness **Credits: 3**

FDNT 143 - Current Issues in Nutrition and Wellness **Credits: 3**

NURS 143 - Healthy People—Promoting Wellness **Credits: 3**

Liberal Studies Electives: 6

COSC 101 - Computer Literacy **Credits: 3**

or

IFMG 101 - Computer Literacy **Credits: 3**

ECON 122 - Principles of Microeconomics **Credits: 3**

No course with KHSS prefix

Major: 60

Core Requirements: 9

KHSS 135 - Careers in Kinesiology, Health, and Sport **Credits: 1**

KHSS 175 - Prevention and Care of Injuries to the Physically Active **Credits: 2**

KHSS 225 - Social Issues in Sport **Credits: 3**

KHSS 341 - Evaluations and Analytics in Kinesiology **Credits: 3**

Sport Administration Requirements: 51

ACCT 201 - Accounting Principles I **Credits: 3**

KHSS 270 - Sport Communication **Credits: 3**

KHSS 280 - Aquatic Management and Operation **Credits: 3**

KHSS 292 - Introduction to Sport Management **Credits: 3**

KHSS 319 - Field Practicum I **Credits: 3**

KHSS 320 - Managing Facilities and Events in Sport **Credits: 3**

KHSS 351 - Managing Budgets and Technology in Sport **Credits: 3**

KHSS 445 - Business Practices in Sport **Credits: 3**

KHSS 460 - Law and Issues in Managing Sport **Credits: 3**

KHSS 465 - Sport Management Capstone **Credits: 3**

KHSS 493 - Internship **Credits: 1-12**

MGMT 300 - Human Resource Management **Credits: 3**

MGMT 310 - Principles of Management **Credits: 3**

MKTG 320 - Principles of Marketing **Credits: 3**
MKTG 435 - Professional Selling and Sales Management **Credits: 3**

Major Electives: 6

Two courses from the following:

ACCT 202 - Accounting Principles II **Credits: 3**
BCOM 321 - Business and Interpersonal Communications **Credits: 3**
COMM 150 - Media Aesthetics **Credits: 3**
COMM 251 - Television Production **Credits: 3**
ECON 239 - Economics of Sports **Credits: 3**
FIN 310 - Fundamentals of Finance **Credits: 3**
HOSP 235 - Tourism Management **Credits: 3**
HOSP 280 - Special Event Management **Credits: 3**
HOSP 347 - Meeting and Convention Management **Credits: 3**
KHSS 221 - Human Structure and Function **Credits: 3**
KHSS 315 - Biomechanics **Credits: 3**
KHSS 333 - Psychology of Coaching **Credits: 3**
KHSS 335 - Athletic Coaching **Credits: 3**
KHSS 343 - Physiology of Exercise **Credits: 3**
KHSS 375 - Physiological Basis of Strength Training and Conditioning **Credits: 3**
KHSS 412 - Physical Activity and Stress Management **Credits: 3**
KHSS 437 - Coaching Disability Sport **Credits: 3**
KHSS 441 - Psychosocial Implications for Health and Physical Education **Credits: 3**
MGMT 275 - Introduction to Entrepreneurship **Credits: 3**
MGMT 300 - Human Resource Management **Credits: 3**
MKTG 321 - Consumer Behavior **Credits: 3**

Free Electives: 14

Total Degree Requirements: 120

Bachelor of Science in Education

Community Health Education (non-teacher certification), Health and Physical Education, BSED

This program of study focuses on health promotion and disease prevention through community educational services. This track prepares individuals to develop trainings and implement curriculum focused on better health and educational outcomes. Graduates of this program can seek employment with health and education agencies involved in community-based training and prevention related to HIV/STI/AIDS, obesity, dating violence and bullying, communicable diseases, tobacco, drugs and alcohol, sexual health and/or pregnancy prevention. Students can specialize in several emphasis areas, including Communications, Aging Populations, Nutrition, Lifetime Physical Activity, Human Service, Child Studies, and Women's and Gender Studies. Graduates will be eligible to sit for the NCHEC's Certified Health Education Specialist (CHES) exam. This track does not lead to K-12 teacher certification. Requirements for the Community Health Education Track include the university's Liberal Studies requirements, the departmental core courses, and the Community Health Education required courses. Students must also maintain a cumulative GPA of 2.7 and a "C" or better in all of the required core courses within this track.

Liberal Studies: 43

As outlined in Liberal Studies Requirements section with the following specifications:

Mathematics:

MATH 101 - Foundations of Mathematics **Credits:** 3 or higher (must be approved as Liberal Studies Mathematics courses)

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog

BIOL 104 - Human Biology: How the Human Body Works **Credits:** 4
and a three credit non-laboratory course

Social Science:

PSYC 101 - General Psychology **Credits:** 3

Liberal Studies Elective: 3

MATH 217 - Probability and Statistics **Credits:** 3

Major: 18

Required Courses:

KHSS 135 - Careers in Kinesiology, Health, and Sport **Credits:** 1
KHSS 175 - Prevention and Care of Injuries to the Physically Active **Credits:** 2
KHSS 209 - Motor Behavior **Credits:** 3
KHSS 256 - Applied Human Structure and Conditioning **Credits:** 3
KHSS 341 - Evaluations and Analytics in Kinesiology **Credits:** 3
KHSS 441 - Psychosocial Implications for Health and Physical Education **Credits:** 3
KHSS 442 - Senior Seminar: Professional Development in Health, Physical Education, and Sport **Credits:** 3

Professional Requirements: 24

Community Health Education Requirements:

EDSP 102 - Educational Psychology **Credits:** 3
KHSS 316 - Instruction of Child Health Concepts **Credits:** 3
KHSS 318 - Preprofessional Experience I **Credits:** 3
KHSS 325 - School and Community Health **Credits:** 3
KHSS 370 - Adapted Health and Physical Education **Credits:** 3
KHSS 417 - Contemporary Issues in School and Community Health **Credits:** 3
KHSS 420 - Health Education and Promotion at the Workplace **Credits:** 3
KHSS 426 - Health Science Instruction **Credits:** 3
KHSS 493 - Internship **Credits:** 1-12

Controlled Electives: 9-12

(Must choose one emphasis area from A-G)

A. Communications (9)

COMM 101 - Introduction to Communications, Media, and Culture **Credits: 3**
COMM 205 - Making Presentations with Media **Credits: 3**
COMM 230 - Global Media and Communication **Credits: 3**

B. Nutrition (12)

FDNT 212 - Nutrition **Credits: 3**
FDNT 213 - Life Cycle Nutrition **Credits: 3**
FDNT 245 - Sports Nutrition **Credits: 3**
FDNT 402 - Community Nutrition **Credits: 3**

C. Lifetime Physical Activity (12)

FDNT 245 - Sports Nutrition **Credits: 3**
KHSS 213 - Recreational Sports and Lifetime Activities **Credits: 3**
KHSS 350 - Health Aspects of Aging **Credits: 3**
KHSS 413 - Wellness Coaching for Lifestyle Behavior Management **Credits: 3**

D. Aging Populations (12)

KHSS 350 - Health Aspects of Aging **Credits: 3**
KHSS 413 - Wellness Coaching for Lifestyle Behavior Management **Credits: 3**
PSYC 312 - Adult Development and Aging **Credits: 3**
SOC 357 - Sociology of Aging and the Life-course **Credits: 3**

E. Human Service (12)

PSYC 235 - Social Psychology **Credits: 3**
SOC 320 - Sociological Theory **Credits: 3**
SOC 336 - Sociology of the Family **Credits: 3**
SOC 391 - Foundations of Sociological Practice **Credits: 3**

F. Women's Studies (12)

PSYC 379 - Psychology of Human Sexuality **Credits: 3**
SOC 251 - Sociology of Human Sexuality **Credits: 3**
SOC 427 - Social Perspectives on Intimate Partner Violence **Credits: 3**
WGS 200 - Introduction to Women's and Gender Studies **Credits: 3**

G. Child Studies (9)

SOC 231 - Contemporary Social Problems **Credits: 3**
SOC 333 - Delinquency and Youth **Credits: 3**
SOC 428 - Child Abuse **Credits: 3**

Free Electives: 17-20

Total Degree Requirements: 120

K-12 Teacher Education, Health and Physical Education, BSED

The Bachelor of Science in Education–Health and Physical Education provides emphasis on pedagogical content and application. This program prepares students with the knowledge and experience to instruct in various learning environments. Two specialty programs of study have been developed for this degree program, including the K-12 Teacher Education Certification Track and two non-teacher certification tracks, Community Health Education and Recreation and Leisure Studies. These programs provide students with the theory, strategy, and application necessary to work with individuals in various instructional settings. Each program provides an interdisciplinary experience that prepares students for specific career paths as well as multiple credentialing options.

K-12 Teacher Education

The Health and Physical Education Teacher Education program is accredited by the National Council for Accreditation of Teacher Education. Requirements for the bachelor of science in education degree program in health and physical education include the university's Liberal Studies requirements, Professional Education requirements, and the Health and Physical Education core requirements. Upon completion of the degree program and successfully passing the Praxis exam, the student is qualified for an Instructional I Certificate in Health and Physical Education, issued by the Pennsylvania Department of Education in Harrisburg. This certificate is valid for teaching health and physical education in grades K-12 for three years in the public schools of Pennsylvania. All students seeking Pennsylvania certification must follow the 3-Step Process described in the section "Admission to Teacher Education and Certification" found in the College of Education and Communications section of this catalog.

The Health and Physical Education curriculum identifies a required core of studies that emphasizes a body of knowledge relevant to the study of professional health and physical education, as well as the study of physical education and sport. Courses contained in the core are those that are intended to enable students to identify and solve problems by applying relevant knowledge and also to engage in self-directed learning.

Candidates for degree programs in health and physical education must demonstrate acceptable cognitive and psychomotor qualifications as well as desirable character and personality traits. The professional programs seek to foster those qualities of individual character and competence that are inherent in personal and professional maturity. Specific competencies and curriculum requirements are defined within each degree-specific program, and student progress is supervised by the academic advisor.

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 101 - Foundations of Mathematics **Credits:** 3 or higher (must be approved as Liberal Studies Mathematics courses)

Natural Science:

BIOL 104 - Human Biology: How the Human Body Works **Credits:** 4

BIOL 106 - Human Genetics and Health **Credits:** 3

or

CHEM 101 - College Chemistry I **Credits:** 4

CHEM 102 - College Chemistry II **Credits:** 4

Social Science:

PSYC 101 - General Psychology **Credits:** 3

Liberal Studies Elective: 3

MATH 217 - Probability and Statistics **Credits:** 3

No course with KHSS prefix

Major: 25

(1)

Required Courses:

- KHSS 135 - Careers in Kinesiology, Health, and Sport **Credits: 1**
- KHSS 175 - Prevention and Care of Injuries to the Physically Active **Credits: 2**
- KHSS 209 - Motor Behavior **Credits: 3**
- KHSS 221 - Human Structure and Function **Credits: 3**
- KHSS 261 - Water Safety Instructor **Credits: 1**
- KHSS 315 - Biomechanics **Credits: 3**
- KHSS 341 - Evaluations and Analytics in Kinesiology **Credits: 3**
- KHSS 343 - Physiology of Exercise **Credits: 3**
- KHSS 441 - Psychosocial Implications for Health and Physical Education **Credits: 3**
- KHSS 442 - Senior Seminar: Professional Development in Health, Physical Education, and Sport **Credits: 3**

Professional Requirements: 27

Health and Physical Education Requirements:

- KHSS 213 - Recreational Sports and Lifetime Activities **Credits: 3**
- KHSS 216 - Instruction of Fundamental Movement Skills **Credits: 3**
- KHSS 218 - Instruction of Tactical Skills and Fitness Concepts **Credits: 3**
- KHSS 316 - Instruction of Child Health Concepts **Credits: 3**
- KHSS 318 - Preprofessional Experience I **Credits: 3**
- KHSS 325 - School and Community Health **Credits: 3**
- KHSS 370 - Adapted Health and Physical Education **Credits: 3**
- KHSS 417 - Contemporary Issues in School and Community Health **Credits: 3**
- KHSS 426 - Health Science Instruction **Credits: 3**

College: 23

Preprofessional Education Requirements:

- ACE 103 - Digital Instructional Technology **Credits: 3**
- EDEX 323 - Instruction of English Language Learners with Special Needs **Credits: 2**
- EDSP 102 - Educational Psychology **Credits: 3**

Professional Education Requirements:

- EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**
- EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**
- EDUC 421 - Student Teaching **Credits: 5-6**
- EDUC 441 - Student Teaching **Credits: 5-12**
- EDUC 442 - School Law **Credits: 1**

Free Electives: 1

Total Degree Requirements: 120

See advisory paragraph "Timely Completion of Degree Requirements" in the section on Requirements for Graduation.

(1) Students are required to obtain and keep CPR instructor certification and water safety instructor certification current before student teaching and through graduation.

Minor

Community Health Minor

The Community Health minor will help prepare students who desire to work in programs that communicate and advocate for health and health education services. This minor would be of interest to sociology, child development and family relations, food and nutrition, and allied health majors who are interested in working with targeted populations on making healthy behavior changes through planned instruction and outreach.

Required Courses: 6

KHSS 325 - School and Community Health **Credits: 3**

KHSS 417 - Contemporary Issues in School and Community Health **Credits: 3**

KHSS 420 - Health Education and Promotion at the Workplace **Credits: 3**

Controlled Electives: 12

(1)

Three courses from the following:

FDNT 212 - Nutrition **Credits: 3**

FDNT 402 - Community Nutrition **Credits: 3**

HOSP 343 - Fund-Raising for Special Events **Credits: 3**

KHSS 341 - Evaluations and Analytics in Kinesiology **Credits: 3**

KHSS 350 - Health Aspects of Aging **Credits: 3**

KHSS 450 - Curriculum and Programming in Sexuality Education **Credits: 3**

SOC 231 - Contemporary Social Problems **Credits: 3**

SOC 333 - Delinquency and Youth **Credits: 3**

SOC 336 - Sociology of the Family **Credits: 3**

Total Minor Requirements: 18

(1) Only two courses with the same prefix may be used as electives.

Exercise Science Minor

The minor in Exercise Science provides students who have an interest in fitness with knowledge to educate and skills to lead exercise for individuals who wish to achieve their personal fitness goals. At the completion of the minor, students will have the knowledge and skills to perform basic fitness assessments and provide individual/small group exercise training. Students will possess the knowledge, skills and abilities to take a variety of national certification examinations at the personal trainer level.

Required Courses: 12

KHSS 221 - Human Structure and Function **Credits: 3**

(3)

KHSS 285 - Group/Individual Exercise Leadership **Credits: 3**

KHSS 286 - Personal Training Practicum **Credits: 3**

Controlled Electives: 6

Two courses from the following:

KHSS 375 - Physiological Basis of Strength Training and Conditioning **Credits: 3**

KHSS 411 - Physical Fitness Appraisal **Credits: 3**

KHSS 413 - Wellness Coaching for Lifestyle Behavior Management **Credits: 3**

KHSS 415 - Lifestyle Behavior Management for Physical Activity **Credits: 3**

Total Minor Requirements: 18

(1) Completion of the Exercise Science minor does not guarantee entry into the Exercise Science major. Students desiring transfer into the INDIANA UNIVERSITY OF PENNSYLVANIA UNDERGRADUATE CATALOG, 2019-20 Page 111 Exercise Science major must have a minimum 2.5 overall GPA.

(2) Students must attain a grade "C" or better in each of the courses.

(3) Students must take KHSS 221 before any other class in the minor. BIOL 150 may be substituted.

Sport Management Minor

This minor is recommended for students majoring in related disciplines such as exercise science, health and physical education, athletic training, accounting, communications media, economics, finance, human resource management, management, and marketing and for students who have a personal interest in sport management. It provides students with the necessary skills to work in management within the sport industry.

Required Courses: 12

KHSS 292 - Introduction to Sport Management **Credits: 3**

KHSS 320 - Managing Facilities and Events in Sport **Credits: 3**

KHSS 445 - Business Practices in Sport **Credits: 3**

KHSS 460 - Law and Issues in Managing Sport **Credits: 3**

Controlled Electives: 6

Two courses from the following:

ECON 239 - Economics of Sports **Credits: 3**

KHSS 270 - Sport Communication **Credits: 3**

KHSS 280 - Aquatic Management and Operation **Credits: 3**

KHSS 335 - Athletic Coaching **Credits: 3**

KHSS 351 - Managing Budgets and Technology in Sport **Credits: 3**

KHSS 493 - Internship **Credits: 1-12**

Total Minor Requirements: 18

Certificate and Certification Programs

Athletic Coaching Certificate

This certificate is recommended for students majoring in disciplines such as exercise science, health and physical education, athletic training, and education and for students who have a personal interest in coaching as a profession. It provides students with the necessary skills to work in the

athletic coaching industry. Students will have a chance to earn a variety of certifications, including ASEP Coaching Certification, Certified Disability Sport Specialist, Certified Special Olympics Coach.

Required Courses: 17

KHSS 175 - Prevention and Care of Injuries to the Physically Active **Credits: 2**
KHSS 209 - Motor Behavior **Credits: 3 (1)**
KHSS 333 - Psychology of Coaching **Credits: 3 (1)**
KHSS 335 - Athletic Coaching **Credits: 3 (1)**
KHSS 437 - Coaching Disability Sport **Credits: 3 (1)**
KHSS 493 - Internship **Credits: 1-12**

Controlled Elective: 3

One course from the following:

KHSS 221 - Human Structure and Function **Credits: 3**
KHSS 256 - Applied Human Structure and Conditioning **Credits: 3 (1)**
KHSS 292 - Introduction to Sport Management **Credits: 3 (1)**

Total Certificate Requirements: 20

(1) Courses have been designed as distance education courses.

Driver Education Certification

Candidates for the driver education certification must possess, or be a candidate for, a valid Pennsylvania certificate in any area of certification. A student must currently complete the following four courses: KHSS 251, KHSS 252, KHSS 353, and KHSS 354. Students must request the certificate in driver education when they apply for graduation. For students who have already graduated, contact the Office of the Dean, College of Education and Communications, for correct procedures.

Required Courses:

The four courses are offered that prepare students for the teaching driver education in both public and private settings, and also prepares students to take the Pennsylvania Department of Education certification exam (Pennsylvania Safety Driver Education Teacher Certification Assessment). A valid driver's license is required to take KHSS 252 and KHSS 354.

KHSS 251 - Foundations of Safety and Emergency Health Care **Credits: 3 (1)**
KHSS 252 - Introduction to the Driving Task **Credits: 3**
KHSS 353 - Driver Education Program Management **Credits: 3**
KHSS 354 - Application of Driver Education Instructional Modes **Credits: 3**

Total Certificate Requirements: 12

(1) KHSS 251 may be substituted for KHSS 242 in the core curriculum.

Institute for Rural Health and Safety

Website: www.iup.edu/irhs

Email: IHRS-SAFETY-PROGRAMS@iup.edu

Louis J. Pesci, Director

The IUP Institute for Rural Health and Safety (IRHS) brings together university personnel from various disciplines and professional backgrounds to solve problems related to health and safety in rural areas. IRHS includes three centers with certification capabilities, the Center for Transportation, Teacher certification in Safety/Driver Education, the Emergency Medical Technician Certificate, Center for Emergency Services Training, and the Center for Policy and Data Analysis.

Certificate and Certification Programs

Center for Transportation, Teacher certification in Safety/Driver Education

Website: www.iup.edu/rural-health-safety/center-for-transportation

The Center for Transportation focuses on improving safety through injury prevention by offering teacher certification in safety/driver education, driver training programs, and by coordinating community programs and events that promote safe driving. Injury is the leading cause of death for persons age 1 to 44. Unintentional motor vehicle traffic crashes remain the leading cause of injury death for those age 5 to 24 and the second leading cause of injury death for those age 1 to 4 and 25 and older.

Teacher certification in Safety/Driver Education is the last program of its kind in Pennsylvania that certifies teachers and instructors to teach driver education. The Driver Education Certification program requires completion of four core courses through cooperative effort with the Department of Kinesiology, Health, and Sport Science.

From **Novice Driver Education** programs for beginning drivers to **Advanced Driver Training** programs in emergency driving techniques, including perceptual driving, the IRHS provides a cadre of courses, all designed to meet the needs of the student.

Community Traffic Safety projects are Community Health Education projects that are federally funded and contracted with the Pennsylvania Department of Transportation's Bureau of Maintenance and Operations. Originating at IUP in 1987, programs and trainings for corporations, schools, civic groups, law enforcement agencies, etc., include topics such as occupant protection, impaired driving, distracted driving, aggressive driving, safe driving near heavy trucks, motorcycles and other vulnerable road users, and safety while walking and bicycling, with emphasis on young drivers and mature drivers.

A secondary focus for the Center for Transportation is on health by reducing obesity and increasing physical activity. According to the National Institutes of Health, obesity and overweight are the second leading causes of preventable death in the US, behind only tobacco use. Center staff teach courses in active transportation planning, complete walkability assessments, and promote walk- and bike-friendly places to foster healthy communities in Pennsylvania.

Emergency Medical Technician Certificate, Center for Emergency Services Training

Website: <https://www.iup.edu/est/emt-training/>

Emergency Medical Technician (EMT) is a non-degree certificate program offered through the IUP Institute for Rural Health and Safety provides the necessary coursework to apply for the National Registry and Pennsylvania EMT certification or licensure, Issued by National Registry and Pennsylvania Department of Health. Certification or licensure is valid for 3 years.

The Emergency Medical Technician (EMT) program will primarily be designed for future emergency medical service personnel but is appropriate for anyone who may respond to emergencies, including fire/rescue personnel, nurses, coaches, athletic trainers, and safety professionals. Participants who successfully complete this program are eligible to take National Registry of EMT certification exams for both Pennsylvania certification and national certification as an EMT. The EMT program does have an articulation agreement for credit transfer, but only in the Kinesiology, Health and Sport Science Program. Other departments could embed EMT into their programs, for example: Athletic Training, Biology Pre-Med, Public Health, Natural Science Pre-Physical Therapy and Physician's Assistant.

The EMT program is accredited by Pennsylvania Department of Health. This pursuant to the Emergency Medical Services System, Act of August 18, 2009, P.L. 308, No. 37 as amended, and as set forth in the rules and regulations. The Pennsylvania Department of Health hereby issues this certificate of accreditation to conduct education programs for prehospital personnel in the Commonwealth of Pennsylvania.

- Accreditation Number: 0068110165
- Types of Training Programs: BLS and ALS
- Date of Issue: 11/28/2018
- Expiration: 12/31/2021
- Region: EMS West

Admission to the EMT program requires a HS Diploma/GED, approval of the Director of Emergency Services Training, and various clearances.

The 152-hour (pass/fail) program may be offered at IUP's Indiana campus, and the West Pike Institute for Rural Health and Safety or Monroeville sites. Successful completion requires students to pass all modular exams and the final exam with 70% or greater, have a minimum of 10 patient contacts in the clinical/field, and graded as competent in the cognitive, affective and psychomotor domains.

Students will receive a certificate upon passing the program. A course representing the EMT program will appear on the student's IUP clock hour transcript which will serve as official confirmation of completion.

More details outlining the program's curriculum, fees, and required clearances are outlined on the IUP Institute for Rural Health and Safety webpage.

Paramedic Certificate, Center for Emergency Services Training

The Center for Emergency Services Training offers programs designed to meet the training needs of ambulance, fire, and police personnel in the areas of emergency medical services and rescue. Projects include emergency services training for first responders through a federal Health Resources and Services Administration grant to reduce incidences of morbidity and mortality related to opioid usage in rural areas, and for employees in industrial settings like power plants and coal mines. Two certifications available are Emergency Medical Technician and Paramedic.

The **Paramedic** 1,150-clock-hour program with 600 hours in the classroom, including 230 hours of interactive lecture and 370 lab hours. Also, a minimum of 550 hours are required in clinical and field settings, with a minimum of 250 hours at clinical sites, and a minimum of 100 hours during the Summative Capstone Field Internship. Up to 30 transfer credits may be awarded to students with Paramedic certification.

Other Degrees

Center for Policy and Data Analysis

The Center for Policy and Data Analysis focuses on research, surveys, and studies to support the mission of IRHS. Recent projects include an analysis of traffic crashes in Pennsylvania through a grant from the Center for Rural Pennsylvania.

Nursing and Allied Health Professions

Website: www.iup.edu/rn-alliedhealth

Theresa M. Gropelli, Chair

Joyce A. Shanty, Coordinator of Allied Health Professions Programs

The College of Health and Human Services offers a curriculum leading to the Bachelor of Science degree program in nursing. Students are admitted to the Nursing program as freshmen. Those with a previous degree may also be admitted. Internal change of majors who meet criteria are also admitted if seats are available. LPN applicants meeting criteria are admitted to the LPN to BSN track. Upon completion of the program, the graduate is prepared to take the examination for licensure as a registered nurse in Pennsylvania and all other states. The baccalaureate degree program in nursing at Indiana University of Pennsylvania is accredited by the Commission on Collegiate Nursing Education.

The nursing curriculum has as its primary goal the development of professional nurse generalists who are liberally educated, clinically competent, and aware of their social responsibilities as health professionals. The program is designed to provide a broad background in liberal education, coupled with the specialized knowledge and skills required for professional nursing practice. Additionally, the curriculum prepares the nurse to practice within the professional code of nursing ethics, to function effectively as a member of the health care team, and to utilize scientific principles in planning, implementing, and evaluating health care. The nursing curriculum emphasizes concepts in primary, secondary, and tertiary prevention of health problems.

The first two semesters are devoted mainly to Liberal Studies and science courses considered essential to the nursing major. Throughout the last six semesters, clinical experiences in patient care are provided in acute and long-term care facilities as well as community settings.

The Bachelor of Science degree program in nursing is offered for licensed practical nurses who are graduates of accredited, approved practical nursing programs and who have met IUP's admission requirements. The track for licensed practical nurses provides an alternative curriculum accounting for prior work completed in a nursing program. Licensed practical nurse students will fulfill all requirements set by the university. The track is designed to prepare the practical nurse to function as a provider, designer, manager, and coordinator of care in a variety of health care settings.

Prior to graduation, Nursing and Licensed Practical Nurse Track majors must earn a minimum grade of "C" in all required NURS (NURS 211, NURS 212, NURS 213, NURS 214, NURS 236, NURS 312, NURS 316, NURS 330, NURS 331, NURS 332, NURS 333, NURS 336, NURS 337, NURS 412, NURS 431, NURS 432, NURS 433, NURS 434, NURS 436, NURS 437, NURS 440, NURS 450) and BIOL courses. Students in the LPN to BSN track must earn a minimum grade of "C" in all required NURS and BIOL courses for this track. Students earning a "D" in a NURS course may repeat the course as a prerequisite, corequisite or with permission of chairperson. A grade of "D" in a NURS or BIOL course may hinder progression to the next level of required courses when mastery of the content is essential for success. If a student is not successful in a course multiple times, then a student may not be able to complete the major since a course may be taken a maximum of three times with permission of the dean of Health and Human Services.

Detailed information is available in the department office regarding requirements such as health screening, liability insurance, legal clearance, transportation, and professional uniforms.

Change of major applications and criteria are available in the Nursing Department office. Changes of major are granted based on meeting the criteria and seat availability.

Bachelor of Science

Diagnostic Medical Sonography (Ultrasound) Track, Medical Imaging, BS

The program leading to the bachelor of science degree in Medical Imaging is designed to prepare students for admission into an IUP affiliate institution focused on one of three tracks: Nuclear Medicine Technology, Diagnostic Medical Sonography (Ultrasound), or Echocardiography. This program is a 3+1 whereby the student spends the first three years at IUP taking the required math/science and liberal studies courses and then a year at an affiliate where they earn a certificate in one of the specialty diagnostic imaging programs. All of the coursework at IUP is preparatory towards the final year and the requirements by the Medical Imaging profession. A "C" or better in the following courses is required: MATH 105, CHEM 101, ENGL 101, PHYS 111, BIOL 150, and ENGL 310 or BCOM 321. Acceptance at an affiliate school is contingent upon the student meeting the academic program requirements. At the end of their senior year, upon successful completion of the certificate program at an articulated clinical affiliate accredited within the specific discipline, IUP will grant 32 credits that will be applied to the student's transcript and the bachelor's degree in the Diagnostic Imaging track will be conferred.

Diagnostic Medical Sonography or ultrasound, is a medical specialty in which allied health care professionals, use specialized equipment to create images of structures inside the human body. The process involves placing a small device called a transducer against the patient's skin near the body area to be imaged. A stream of high-frequency sound waves are sent into the body, then are detected as the sound waves bounce off internal structures. Different structures in the body reflect these sound waves differently. The reflected sound waves are analyzed by a computer to make an image of the structure(s) on a monitor or an image that can be recorded on hardcopy. These images created by sonographers help aid physicians in diagnosing and treating medical conditions in the abdomen, breast, heart and blood vessels and, more recently, in diagnosing and treating musculoskeletal problems.

Liberal Studies: 47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 105 - College Algebra Credits: 3

Philosophy/Religious Studies:

PHIL 130 - Introduction to Biomedical Ethics **Credits: 3**

Natural Science:

CHEM 101 - College Chemistry I **Credits: 4**

CHEM 102 - College Chemistry II **Credits: 4**

Social Science:

PSYC 101 - General Psychology **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

Liberal Studies Electives: 6

COSC 101 - Computer Literacy **Credits: 3**

or

IFMG 101 - Computer Literacy **Credits: 3**

PHYS 111 - Physics I Lecture **Credits: 3**

no courses with NMDT prefix

Major: 35

Required Courses:

(1)

Articulated courses in track transferred from affiliation agreement.

IMAG 101 - Careers in Medical Imaging **Credits: 1**

IMAG 480 - Medical Imaging Seminar **Credits: 2**

Other Requirements: 23

(2)

BIOL 150 - Human Anatomy **Credits: 4**

BIOL 240 - Human Physiology **Credits: 4**

BIOL 241 - Introductory Medical Microbiology **Credits: 4**

ENGL 310 - Public Speaking **Credits: 3**

or

BCOM 321 - Business and Interpersonal Communications **Credits: 3**

NURS 314 - Health Policy and Law **Credits: 3**

PHYS 112 - Physics II Lecture **Credits: 3**

PHYS 121 - Physics I Lab **Credits: 1**

PHYS 122 - Physics II Lab **Credits: 1**

Free Electives: 15

(3)

Total Requirements: 120

(1) These courses are offered at the University of Findlay/Nuclear Medicine Institute, Findlay, Ohio, and are consistent with requirements of the Joint Review committee on Education in Diagnostic Medical Sonography. The courses are completed during the final 12 months of the degree program.

(2) Students are also required to complete a medical terminology course/ program. Options to fulfill this requirement must be approved by the coordinator of allied health professions.

(3) Two writing-intensive courses are required. Both courses may be from either Liberal Studies or free electives.

Echocardiography Track, Medical Imaging, BS

The program leading to the bachelor of science degree in Medical Imaging is designed to prepare students for admission into an IUP affiliate institution focused on one of three tracks: Nuclear Medicine Technology, Diagnostic Medical Sonography (Ultrasound), or Echocardiography. This program is a 3+1 whereby the student spends the first three years at IUP taking the required math/science and liberal studies courses and then a year at an affiliate where they earn a certificate in one of the specialty diagnostic imaging programs. All of the coursework at IUP is preparatory towards the final year and the requirements by the Medical Imaging profession. A "C" or better in the following courses is required: MATH 105, CHEM 101, ENGL 101, PHYS 111, BIOL 150, and ENGL 310 or BCOM 321. Acceptance at an affiliate school is contingent upon the student meeting the academic program requirements. At the end of their senior year, upon successful completion of the certificate program at an articulated clinical affiliate accredited within the specific discipline, IUP will grant 32 credits that will be applied to the student's transcript and the bachelor's degree in the Diagnostic Imaging track will be conferred.

Echocardiography is a medical specialty in which allied health care professionals use specialized equipment to create images of structures inside the human body. These professionals use echocardiogram technology to produce images of the patient's hearts. They create 2-D and 3-D pictures of the heart through the use of high frequency sound waves and special equipment. A transducer is placed against the patient's skin by sending a stream of high frequency sound waves into the body and then detects the sound waves as they bounce off the heart. The reflected sound waves are analyzed by a computer to make an image of the structure(s) on a monitor or images that can be recorded on hard copy. The images created by sonographers help aid physicians in diagnosing and treating numerous disease processes. Sonographers are trusted members of the healthcare team and are relied upon to obtain diagnostic images that will allow physicians to provide the best possible care for their patients. Echocardiography technicians may specialize in adult echocardiography, pediatric echocardiography or fetal echocardiography.

Liberal Studies: 47

As outlined in Liberal Studies Requirements section with the following specifications:

Mathematics:

MATH 105 - College Algebra **Credits: 3**

Natural Science:

CHEM 101 - College Chemistry I **Credits: 4**

CHEM 102 - College Chemistry II **Credits: 4**

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Or

SOC 151 - Principles of Sociology **Credits: 3**

Or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

Liberal Studies Electives: 6

COSC 101 - Computer Literacy **Credits: 3**
Or
IFMG 101 - Computer Literacy **Credits: 3**
PHYS 111 - Physics I Lecture **Credits: 3**

Major: 35

Required Courses:

(1)

Articulated courses in track transferred from affiliation agreement.

IMAG 101 - Careers in Medical Imaging **Credits: 1**
IMAG 480 - Medical Imaging Seminar **Credits: 2**

Other Requirements: 23

(2)

BIOL 150 - Human Anatomy **Credits: 4**
BIOL 240 - Human Physiology **Credits: 4**
BIOL 241 - Introductory Medical Microbiology **Credits: 4**
ENGL 310 - Public Speaking **Credits: 3**
or
BCOM 321 - Business and Interpersonal Communications **Credits: 3**
NURS 314 - Health Policy and Law **Credits: 3**
PHYS 112 - Physics II Lecture **Credits: 3**
PHYS 121 - Physics I Lab **Credits: 1**
PHYS 122 - Physics II Lab **Credits: 1**

Free Electives: 15

(3)

Total Requirements: 120

(1) These courses are offered at the University of Findlay and are consistent with requirement of the Joint Review Committee on Education in Diagnostic Medical Sonography. The courses are completed during the final 12 months of the degree program.

(2) Students are also required to complete a medical terminology course/ program. Options to fulfill this requirement must be approved by the coordinator of allied health professions.

(3) Two writing-intensive courses are required. Both courses may be from either Liberal Studies or free electives.

Philosophy/Religious Studies:

PHIL 130 - Introduction to Biomedical Ethics **Credits: 3**

Philosophy/Religious Studies:

PHIL 130 - Introduction to Biomedical Ethics **Credits: 3**

Licensed Practical Nurse Track, Nursing, BS

The Pennsylvania State Board of Nursing requires four units of English, three units of social studies, two units of math (one of which is algebra), and two units of science in high school for admission to the nursing major.

Liberal Studies: 43

As outlined in the Liberal Studies Requirements with the following specifications:

Dimensions of Wellness:

Fulfilled by the major

Mathematics:

MATH 217 - Probability and Statistics **Credits: 3**

Natural Science:

CHEM 101 - College Chemistry I **Credits: 4**
CHEM 102 - College Chemistry II **Credits: 4**
(CHEM 111/CHEM 112 could fulfill with permission)

Social Science:

PSYC 101 - General Psychology **Credits: 3**
SOC 151 - Principles of Sociology **Credits: 3**
or
SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

Liberal Studies Electives: 5

PSYC
No course with NURS prefix

Major: 50-53

Required Courses:

NURS 214 - Health Assessment **Credits: 3**
NURS 312 - Professional Nursing **Credits: 2**
NURS 316 - Evidence-Based Practice in Nursing **Credits: 3**
NURS 334 - Transitions in Professional Nursing **Credits: 3**
NURS 412 - Nursing Management **Credits: 2**
NURS 431 - Public/Community Nursing Clinical **Credits: 2**
NURS 432 - Psychiatric/Mental Health **Credits: 2**
NURS 433 - Psychiatric/Mental Health Clinical **Credits: 2**
NURS 434 - Public/Community Nursing **Credits: 2**
NURS 436 - Adult Health II **Credits: 4**
NURS 437 - Adult Health II Clinical **Credits: 2.5**
NURS 440 - Nursing Management Clinical **Credits: 2.5**

NURS 450 - A Cognitive Approach to Clinical Problem Solving **Credits:** 3 (2)

NURS 493 - Internship **Credits:** 1-12

NURS XXX - Advisor approved NURS elective **Credits:** 3

Adult Health:

NURS 336 - Adult Health I **Credits:** 4

NURS 337 - Adult Health I Clinical **Credits:** 5

or

Credits by Exam **Credits:** 8 (3) and

NURS 493 - Internship **Credits:** 1-12

Maternal Neonatal Health:

NURS 330 - Care of the Child and Family **Credits:** 2

NURS 331 - Care of the Child and Family Clinical **Credits:** 2

NURS 332 - Maternal-Neonatal Health **Credits:** 2

NURS 333 - Maternal-Neonatal Clinical **Credits:** 2

or

Credits by Exam **Credits:** 7 (3) and

NURS 493 - Internship **Credits:** 1-12

Other Requirements: 15

BIOL 150 - Human Anatomy **Credits:** 4

BIOL 240 - Human Physiology **Credits:** 4

BIOL 241 - Introductory Medical Microbiology **Credits:** 4

FDNT 212 - Nutrition **Credits:** 3

Free Electives: 9-12

Total Degree Requirements: 120

(2) Students who achieve a higher score than a specified minimum on a department-required standardized test(s) are exempt from NURS 450. These students would need 12cr of free electives.

(3) Students have the option of earning up to 15cr via examination and taking NURS 493 (up to 2cr) or completing NURS 330, NURS 331, NURS 332, NURS 333, NURS 336, and NURS 337 (17cr). Exam results must be received before students register for any 300- or 400-level nursing courses other than NURS 334.

Medical Technology, BS

Medical Technology encompasses the study of analytical and diagnostic procedures used in clinical laboratories and in medical research. Medical technologists (also known as clinical laboratory scientists) perform a variety of laboratory tests, upon which the physician depends for accurate diagnosis, prognosis, and proper treatment of the patient. The program is designed as a 3+1 with three years at IUP taking the required sciences and liberal studies courses and then one year of clinical experience at an IUP-approved affiliate program. All of the coursework at IUP is preparatory toward the final year and the requirements by the Medical Technology profession. At the end of their senior year, upon successful completion of the program at an articulated clinical affiliate accredited within the discipline, IUP will grant 30 credits that will be applied to the student's transcript and the bachelor's degree in Medical Technology will be conferred. The program also prepares the student for graduate and professional schools. IUP maintains affiliations with accredited schools of medical technology/ clinical laboratory science. To be competitive for clinical placement, the student must have a minimum overall GPA and math/science GPA of 2.8. Since admission to any hospital program is on a competitive basis, IUP cannot guarantee admission.

The following programs maintain agreements of affiliation with IUP:

UPMC Altoona Regional Health System, Altoona; Conemaugh Memorial Medical Center, Johnstown; Pennsylvania General College of Health Sciences, Lancaster; the Reading Hospital School of Health Science, Reading; St. Christopher's Hospital for Children, Philadelphia; St. Vincent Health Center, Erie; UPMC Susquehanna Health, Williamsport; UPMC Chautauqua WCA Hospital, Jamestown, New York; and Wellspan York Hospital, York.

Completion of academic studies at IUP and of one year of clinical experience qualifies the student to take a national certification examination. Successful results on this examination lead to certification as a professionally qualified medical technologist/clinical laboratory scientist.

Liberal Studies:44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 217 - Probability and Statistics **Credits: 3**

Natural Science:

CHEM 111 - General Chemistry I **Credits: 4**

CHEM 112 - General Chemistry II **Credits: 4**

Writing Intensive:

One required

Liberal Studies Elective: 3

PHYS 111 - Physics I Lecture **Credits: 3**

Major: 30

Required Courses:

Articulated courses in Medical Technology transferred from affiliation agreement (1)

MEDT 494 - Clinical Microbiology **Credits: 6-10**

MEDT 495 - Clinical Chemistry **Credits: 7-10**

MEDT 496 - Clinical Hematology/Coagulation **Credits: 4-7**

MEDT 497 - Clinical Immunohematology **Credits: 3-6**

MEDT 498 - Clinical Immunology/Serology **Credits: 2-4**

MEDT 499 - Clinical Seminar **Credits: 0-6**

Other Requirements: 40

BIOL 150 - Human Anatomy **Credits: 4**

BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**

BIOL 240 - Human Physiology **Credits: 4**

BIOL 241 - Introductory Medical Microbiology **Credits: 4**

or

BIOL 250 - Principles of Microbiology **Credits: 4**

BIOL 364 - Immunology **Credits: 3**
CHEM 231 - Organic Chemistry I **Credits: 4**
CHEM 332 - Organic Chemistry II **Credits: 4**
CHEM 325 - Analytical Chemistry I **Credits: 4**
CHEM 351 - Biochemistry **Credits: 4**
PHYS 121 - Physics I Lab **Credits: 1**
PHYS 112 - Physics II Lecture **Credits: 3**
PHYS 122 - Physics II Lab **Credits: 1**

Free Electives: 6

Total Degree Requirements: 120

See advisory paragraph "Timely Completion of Degree Requirements" in the section on Requirements for Graduation.

(1) These courses are offered by affiliating, hospital-based schools of medical technology (also known as clinical laboratory science). Areas of study are consistent with requirements of the National Accrediting Agency for Clinical Laboratory Sciences and are completed during the final 12 months of the degree program at an affiliating school.

Nuclear Medicine Technology Track, Medical Imaging, BS

The program leading to the bachelor of science degree in Medical Imaging is designed to prepare students for admission into an IUP affiliate institution focused on one of three tracks: Nuclear Medicine Technology, Diagnostic Medical Sonography (Ultrasound), or Echocardiography. This program is a 3+1 whereby the student spends the first three years at IUP taking the required math/science and liberal studies courses and then a year at an affiliate where they earn a certificate in one of the specialty diagnostic imaging programs. All of the coursework at IUP is preparatory towards the final year and the requirements by the Medical Imaging profession. A "C" or better in the following courses is required: MATH 105, CHEM 101, ENGL 101, PHYS 111, BIOL 150, and ENGL 310 or BCOM 321. Acceptance at an affiliate school is contingent upon the student meeting the academic program requirements. At the end of their senior year, upon successful completion of the certificate program at an articulated clinical affiliate accredited within the specific discipline, IUP will grant 32 credits that will be applied to the student's transcript and the bachelor's degree in the Diagnostic Imaging track will be conferred.

Nuclear Medicine Technology is a medical specialty in which allied health care professionals, under the direction of a nuclear medicine physician, use radioactive materials in the diagnosis and treatment of disease. They are responsible for patient education and preparation regarding the nuclear medicine procedures, administration of radiopharmaceuticals, performing complex computer imaging studies, and radiation safety procedures for both patients and staff. The nuclear medicine technologist's skills complement those of the nuclear medicine physician.

Students are admitted to the Medical Imaging major as freshmen into any of the three tracks. Transfer students and those with a previous degree may also be admitted into one of the tracks. Students must meet specific academic requirements to be considered for admission to the affiliate Medical Imaging track. Admission is competitive; IUP cannot guarantee admission. Information regarding academic requirements and other special requirements for the clinical year is available in the department's office.

The Nuclear Medicine Technology program is fully accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology. Diagnostic Medical Sonography and Echocardiography Programs are accredited by the Commission on Accreditation of Allied Health Education Programs upon recommendation of the Joint Review Committee on Education in Diagnostic Medical Sonography.

Liberal Studies: 47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 105 - College Algebra **Credits: 3**

Philosophy/Religious Studies:

PHIL 130 - Introduction to Biomedical Ethics **Credits: 3**

Natural Science:

CHEM 101 - College Chemistry I **Credits: 4**

CHEM 102 - College Chemistry II **Credits: 4**

Social Science:

PSYC 101 - General Psychology **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

Liberal Studies Electives: 6

COSC 101 - Computer Literacy **Credits: 3**

or

IFMG 101 - Computer Literacy **Credits: 3**

PHYS 111 - Physics I Lecture **Credits: 3**

No courses with NMDT prefix

Major: 35

Required Courses:

Articulated courses in track transferred from affiliation agreement (1)

IMAG 101 - Careers in Medical Imaging **Credits: 1**

IMAG 480 - Medical Imaging Seminar **Credits: 2**

Other Requirements: 23

(2)

BIOL 150 - Human Anatomy **Credits: 4**

BIOL 240 - Human Physiology **Credits: 4**

BIOL 241 - Introductory Medical Microbiology **Credits: 4**

ENGL 310 - Public Speaking **Credits: 3**

or

BCOM 321 - Business and Interpersonal Communications **Credits: 3**

NURS 314 - Health Policy and Law **Credits: 3**

PHYS 121 - Physics I Lab **Credits: 1**

PHYS 112 - Physics II Lecture **Credits: 3**

PHYS 122 - Physics II Lab **Credits: 1**

Free Electives: 15

(3)

Total Degree Requirements: 120

(1) These courses are offered at the University of Findlay/Nuclear Medicine Institute, Findlay, Ohio, and/or Community College of Allegheny County nuclear medicine technology program, Pittsburgh. These areas of study are consistent with requirements of the JRCNMT. All eight of these areas of study are completed during the final 12 months of the degree program.

(2) Students are also required to complete a medical terminology course/ program. Options to fulfill this requirement must be approved by the coordinator of allied health professions.

(3) Two writing-intensive courses are required. Both courses may be from either Liberal Studies or Free Electives.

Nursing, BS

The Pennsylvania State Board of Nursing requires two units of high school mathematics (one of which is algebra) for admission to the nursing major.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 217 - Probability and Statistics **Credits: 3**

Natural Science:

CHEM 101 - College Chemistry I **Credits: 4**

CHEM 102 - College Chemistry II **Credits: 4**

(CHEM 111/CHEM 112 could fulfill with permission)

Social Science:

PSYC 101 - General Psychology **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

Liberal Studies Elective: 3

PSYC 215 - Developmental Psychology **Credits: 3**

No courses with NURS prefix

Major: 52-55

Required Courses:

NURS 211 - Fundamentals I Clinical **Credits: 1**

NURS 212 - Fundamentals I Theory **Credits: 3**

NURS 213 - Fundamentals II Clinical **Credits: 1**

NURS 214 - Health Assessment **Credits: 3**

NURS 236 - Fundamentals II Theory **Credits: 3**

NURS 312 - Professional Nursing **Credits: 2**

NURS 316 - Evidence-Based Practice in Nursing **Credits: 3**

NURS 330 - Care of the Child and Family **Credits: 2**

NURS 331 - Care of the Child and Family Clinical **Credits: 2**

NURS 332 - Maternal-Neonatal Health **Credits:** 2
NURS 333 - Maternal-Neonatal Clinical **Credits:** 2
NURS 336 - Adult Health I **Credits:** 4
NURS 337 - Adult Health I Clinical **Credits:** 5
NURS 412 - Nursing Management **Credits:** 2
NURS 431 - Public/Community Nursing Clinical **Credits:** 2
NURS 432 - Psychiatric/Mental Health **Credits:** 2
NURS 433 - Psychiatric/Mental Health Clinical **Credits:** 2
NURS 434 - Public/Community Nursing **Credits:** 2
NURS 436 - Adult Health II **Credits:** 4
NURS 437 - Adult Health II Clinical **Credits:** 2.5
NURS 440 - Nursing Management Clinical **Credits:** 2.5
NURS 450 - A Cognitive Approach to Clinical Problem Solving **Credits:** 3 (1)
NURS 493 - Internship **Credits:** 1-12

Other Requirements: 15

Science Sequence:

BIOL 150 - Human Anatomy **Credits:** 4
BIOL 240 - Human Physiology **Credits:** 4
BIOL 241 - Introductory Medical Microbiology **Credits:** 4
FDNT 212 - Nutrition **Credits:** 3

Free Electives: 6-9

Total Degree Requirements: 120

See advisory paragraph "Timely Completion of Degree Requirements" in the section on Requirements for Graduation.

(1) Students who achieve a higher score than a specified minimum on a department-required standardized test(s) are exempt from NURS 450. These students would need 9cr of free electives.

Respiratory Care, BS

Subbarao Elapavaluru, MD, Medical Director *

The bachelor of science degree program in respiratory care prepares the graduate for a career as a registered respiratory care practitioner. Respiratory care practitioners evaluate, treat, and care for people with breathing problems. They assist physicians in the evaluation and treatment of heart and lung disorders. Respiratory care practitioners are experts in the therapeutic use of medical gases, oxygen administration, pulmonary resuscitation, and artificial airways. They are employed in hospitals, extended care facilities, clinics, rehabilitation centers, physicians' offices, educational programs, home care services, as well as, national and international medical device companies.

The program is accredited by the Commission on Accreditation for Respiratory Care (CoARC). The program consists of two academic years of pre-clinical studies (65 credits) on the Indiana campus and two academic years (59 credits) of clinical study at the IUP Northpointe Regional Campus. Students are expected to earn a GPA of at least 2.25 in the required Natural Sciences and Mathematics courses (includes "C" or higher in BIOL 150 and BIOL 240), and an overall GPA of at least 2.0 to be considered for Fall semester admission into the clinical years in respiratory care. However, since admission to the clinical years is competitive, IUP cannot guarantee progression.

Respiratory Care majors must earn a minimum grade of "C" in all required RESP 300 level and 400 level courses to progress. A grade of "D" in a RESP course may hinder progression to the next level of required courses when mastery of the content is essential for success and certification.

Upon graduation, graduates are eligible for certification (CRT) and registration (RRT) in respiratory care. The granting of the degree is not contingent upon passing the credential examinations. Graduates are prepared for graduate degrees that may lead to careers in administration, education, and medicine.

This program is also available to Certified Respiratory Therapists (CRTs) who are graduates of a USDE-accredited, Associate degree respiratory care program. Based upon successful completion and prior approval to transfer academic credits from another respiratory care program, CRT students may be exempt from the RESP 100 and 300 level courses (29 credits). Students who are A.S., CRT must complete 27 credits from the 400 level RESP courses (see list below), which are available on a full-time or part-time basis. There is potential for additional course exemptions that meet prior approval for transfer (liberal studies, math, science); several of these courses may be available online. CRT candidates must provide proof of a valid NBRC credential and a current respiratory license for the state of Pennsylvania.

Detailed information regarding requirements such as health screening, liability insurance, legal clearance, and professional uniforms is available in the Nursing and Allied Health Department office and on the IUP website.

Criteria for change of major and applications are available online through the IUP Department of Nursing and Allied Health Professions.

* pending final paperwork to appoint medical director.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 105 - College Algebra **Credits:** 3 or higher level

Natural Science:

CHEM 101 - College Chemistry I **Credits:** 4
CHEM 102 - College Chemistry II **Credits:** 4

Social Science:

PSYC 101 - General Psychology **Credits:** 3
SOC 151 - Principles of Sociology **Credits:** 3
or
SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits:** 3
Global and multicultural awareness course

Writing Intensive:

Not required

Liberal Studies Elective: 3

No courses with RESP prefix

Major: 56

Required Courses:

RESP 101 - The Profession of Respiratory Care **Credits:** 1
RESP 326 - Respiratory Care Clinical Practice I **Credits:** 3
RESP 327 - Pharmacology **Credits:** 3
RESP 328 - Applied Concepts in Respiratory Care **Credits:** 3
RESP 329 - Respiratory Care Equipment **Credits:** 4

RESP 333 - Respiratory Care Clinical Practice II **Credits: 3**
RESP 334 - Respiratory Care Instrumentation and Application **Credits: 4**
RESP 335 - Patient Care and Emergency Skills **Credits: 4**
RESP 336 - Cardiopulmonary Evaluation and Clinical Correlation **Credits: 4**
RESP 425 - Clinical Case Studies **Credits: 3**
RESP 426 - Respiratory Care Clinical Practice III **Credits: 4**
RESP 429 - Respiratory Care Leadership **Credits: 3**
RESP 430 - Cardiopulmonary Diagnostics **Credits: 3**
RESP 432 - Neonatal and Pediatric Respiratory Care **Credits: 3**
RESP 433 - Respiratory Care Clinical Practice IV **Credits: 4**
RESP 435 - Respiratory Care Across the Continuum **Credits: 3**
RESP 441 - Respiratory Care Professional I **Credits: 2**
RESP 451 - Respiratory Care Professional II **Credits: 2**

Other Requirements: 15

Science Courses:

BIOL 150 - Human Anatomy **Credits: 4**
BIOL 240 - Human Physiology **Credits: 4**
BIOL 241 - Introductory Medical Microbiology **Credits: 4**
PHYS 151 - Medical Physics Lecture **Credits: 3**

Free Electives: 5

Total Degree Requirements: 120

RESP 300- and 400- level courses are completed at IUP Northpointe Regional Campus.

Safety Sciences

Website: www.iup.edu/safetysciences

Tracey Cekada, Chair

The department offers a minor and a Bachelor of Science degree program with a major in safety, health, and environmental applied sciences with a focus on occupational exposures. The program in safety, health, and environmental applied sciences prepares the students for professional, administrative, managerial, and supervisory positions in industry, manufacturing, insurance, transportation, utility, government, construction, trade service industries, and others. There remains a need in Pennsylvania and the nation for university-educated occupational safety, health, and environmental professionals. As a minimum, the curriculum includes a major of 52 credits in safety, health, and environmental applied sciences. The BS with a major in safety, health, and environmental applied sciences is accredited by the Applied Science Accreditation Commission of ABET, <http://www.abet.org>.

Bachelor of Science

Safety, Health, and Environmental Applied Sciences, BS

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 105 - College Algebra **Credits: 3**

Natural Science:

CHEM 101 - College Chemistry I **Credits: 4**

CHEM 102 - College Chemistry II **Credits: 4**

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Global and multicultural awareness course

Liberal Studies Elective: 3

MATH 217 - Probability and Statistics **Credits: 3**

Major: 52-58

Required Courses:

SAFE 101 - Introduction to Occupational Safety and Health **Credits: 3**

SAFE 111 - Principles of Safety I—General Industry **Credits: 3**

SAFE 211 - Principles of Safety II—Construction Industry **Credits: 3**

SAFE 212 - Hazard Prevention Management I **Credits: 3**

SAFE 215 - Safety, Health, and Environmental Communications **Credits: 3**

SAFE 220 - Hazardous Materials and Emergency Management **Credits: 3**

SAFE 310 - Environmental Safety and Health Regulations and Sustainability **Credits: 3**

SAFE 311 - Fire Protection **Credits: 3**

SAFE 330 - Recognition, Evaluation, and Control of Occupational Health Hazards I **Credits: 4**

SAFE 331 - Fundamentals of Industrial Hygiene **Credits: 3**

SAFE 335 - Industrial and Environmental Stressors **Credits: 2**

SAFE 345 - Process and Systems Safety **Credits: 3**

SAFE 346 - Fundamentals of Ergonomics **Credits: 3**

SAFE 347 - Ergonomics **Credits: 3**

SAFE 361 - Air and Water Pollution **Credits: 2**

SAFE 412 - Hazard Prevention Management II **Credits: 3**

SAFE 430 - Recognition, Evaluation, and Control of Occupational Health Hazards II **Credits: 4**

SAFE 435 - Ethics and Professionalism **Credits: 1**

SAFE 488 - Internship **Credits: 12**

or

SAFE 493 - Internship **Credits: 6**

Other Requirements: 18

Additional Science and Mathematics:

BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**

or

BIOL 155 - Human Physiology and Anatomy **Credits: 4**

PHYS 111 - Physics I Lecture **Credits: 3**

PHYS 112 - Physics II Lecture **Credits: 3**

PHYS 121 - Physics I Lab **Credits: 1**

PHYS 122 - Physics II Lab **Credits: 1**

Business Electives:

Two 3cr courses from the following:

- ACCT 200 - Foundations of Accounting **Credits: 3**
- MGMT 300 - Human Resource Management **Credits: 3**
- MGMT 310 - Principles of Management **Credits: 3**
- MGMT 311 - Human Behavior in Organizations **Credits: 3**
- MGMT 434 - Industrial Quality: Statistical Tools and Management **Credits: 3**

Free Electives: 0-6

Total Degree Requirements: 120

Minor

Safety, Health, and Environmental Applied Sciences Minor

The minor consists of 18 credits in safety, health, and environmental applied sciences courses as identified below. The minor has improved job opportunities for students in environmental geoscience, criminology, human resource management, international business, and management.

Required Courses:

- SAFE 101 - Introduction to Occupational Safety and Health **Credits: 3**
- SAFE 111 - Principles of Safety I—General Industry **Credits: 3**
- SAFE 220 - Hazardous Materials and Emergency Management **Credits: 3**
- SAFE 310 - Environmental Safety and Health Regulations and Sustainability **Credits: 3**

Controlled Electives: 6

SAFE courses approved by department chair totaling at least 6cr with at least 3cr being in 300-level or higher course(s). SAFE 100 , The Science of Living Safely, does not count toward the minor degree requirements.

Total Minor Requirements: 18

Certificate and Certification Programs

Shale, Gas, and Energy Certificate

Required Geoscience Courses: 6

- GEOS 119 - Geology of Energy Resources **Credits: 3 (1)**
- GEOS 409 - Geology of Shale Gas—Field Workshop **Credits: 3**

Required Geography Courses: 6

- GEOG 109 - Geographic Information Science and Systems for Energy Applications **Credits: 3 (1)**
- GEOG 409 - Spatial Analysis Applications in the Energy Sectors Workshop **Credits: 3**

Required Safety Science Courses: 6

SAFE 104 - Introduction to Safety in the Natural Gas Industry **Credits:** 3 (1)

SAFE 204 - Principles of Safety in the Natural Gas Industry **Credits:** 3

Total Certificate Requirements: 18

(1) With departmental permission, one 100-level introductory course may be substituted by an appropriate upper-division course.

Other Programs

Bachelor of Science

Behavioral and Mental Health Track, Public Health, BS

Kristi Storti, Director

The Bachelor of Science in Public Health graduate will help meet Pennsylvania's workforce needs in public health and health care related fields and will help meet the strong demand for trained public health professionals projected by national and regional studies. This degree will prepare students for jobs in health administration, community health, and health education. Upon completion of the program, students will understand the science of human physical and mental health, the epidemiology of infectious and chronic diseases as well as the complications of the US and global health care systems with regard to access and ethics of the disparities in health care delivery. The program provides students with options to focus in four academic areas: Environmental and Occupational Health, Behavioral and Mental Health, Epidemiology and Biostatistics, and Global and Rural Communities.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities:

PHIL 122 - Contemporary Moral Issues **Credits:** 3

or

PHIL 130 - Introduction to Biomedical Ethics **Credits:** 3

Mathematics:

MATH 217 - Probability and Statistics **Credits:** 3

Natural Science:

BIOL 104 - Human Biology: How the Human Body Works **Credits:** 4

BIOL 119 - Emerging Diseases **Credits:** 3

Social Science:

Choose three courses from:

ANTH 110 - Contemporary Anthropology **Credits:** 3

or

ANTH 211 - Cultural Anthropology **Credits: 3**

GEOG 104 - World Geography: Global Context **Credits: 3**

or

RGPL 103 - Global Cities: Planning and Development **Credits: 3**

PSYC 101 - General Psychology **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

Liberal Studies Electives:

ECON 122 - Principles of Microeconomics **Credits: 3**

FDNT 145 - Personal Nutrition **Credits: 3**

Public Health Core: 30-33

BIOL 301 - Fundamentals of Epidemiology **Credits: 3**

ECON 360 - Health Economics **Credits: 3**

GEOG 316 - Introduction to Geographic Information Systems **Credits: 3**

or

RGPL 316 - Introduction to Geographic Information Systems **Credits: 3**

NURS 410 - Health Promotion and Social Issues **Credits: 3**

NURS 455 - Health Care Informatics **Credits: 3**

NURS 314 - Health Policy and Law **Credits: 3**

or

ELR 314 - Health Policy and Law **Credits: 3**

PUBH 122 - Foundations of Public Health **Credits: 3**

PUBH 306 - Research Design and Analysis in Public Health **Credits: 3**

PUBH 493 - Internship in Public Health **Credits: 3-6**

SOC 442 - Medical Sociology **Credits: 3**

Concentration: Behavioral and Mental Health: 18

PSYC 332 - Community Psychology and Prevention Science (CAAST) **Credits: 3**

PSYC 374 - Stress and Coping **Credits: 3**

SOC 361 - Social Stratification **Credits: 3**

or

SOC 362 - Racial and Ethnic Minorities **Credits: 3**

or

SOC 363 - Sociology of Gender **Credits: 3**

SOC 448 - Social Welfare Policy **Credits: 3**

two controlled electives (1)

Free Electives: 22-26

(2)

Total Degree Requirements: 120

(1) See advisor.

(2) Minor or certificate recommended.

Environmental and Occupational Health Track, Public Health, BS

Kristi Storti, Director

The Bachelor of Science in Public Health graduate will help meet Pennsylvania's workforce needs in public health and health care related fields and will help meet the strong demand for trained public health professionals projected by national and regional studies. This degree will prepare students for jobs in health administration, community health, and health education. Upon completion of the program, students will understand the science of human physical and mental health, the epidemiology of infectious and chronic diseases as well as the complications of the US and global health care systems with regard to access and ethics of the disparities in health care delivery. The program provides students with options to focus in four academic areas: Environmental and Occupational Health, Behavioral and Mental Health, Epidemiology and Biostatistics, and Global and Rural Communities.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities:

PHIL 122 - Contemporary Moral Issues **Credits: 3**

or

PHIL 130 - Introduction to Biomedical Ethics **Credits: 3**

Mathematics:

MATH 217 - Probability and Statistics **Credits: 3**

Natural Science:

BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**

BIOL 119 - Emerging Diseases **Credits: 3**

Social Science:

Choose three courses from:

ANTH 110 - Contemporary Anthropology **Credits: 3**

or

ANTH 211 - Cultural Anthropology **Credits: 3**

GEOG 104 - World Geography: Global Context **Credits: 3**

or

RGPL 103 - Global Cities: Planning and Development **Credits: 3**

PSYC 101 - General Psychology **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

Liberal Studies Electives:

ECON 122 - Principles of Microeconomics **Credits: 3**

FDNT 145 - Personal Nutrition **Credits: 3**

Public Health Core: 30-33

BIOL 301 - Fundamentals of Epidemiology **Credits: 3**
ECON 360 - Health Economics **Credits: 3**
GEOG 316 - Introduction to Geographic Information Systems **Credits: 3**
or
RGPL 316 - Introduction to Geographic Information Systems **Credits: 3**
NURS 410 - Health Promotion and Social Issues **Credits: 3**
NURS 455 - Health Care Informatics **Credits: 3**
NURS 314 - Health Policy and Law **Credits: 3**
or
ELR 314 - Health Policy and Law **Credits: 3**
PUBH 122 - Foundations of Public Health **Credits: 3**
PUBH 306 - Research Design and Analysis in Public Health **Credits: 3**
PUBH 493 - Internship in Public Health **Credits: 3-6**
SOC 442 - Medical Sociology **Credits: 3**

Concentration: Environmental and Occupational Health: 23

BIOL 221 - Environmental Health and Protection **Credits: 4**
BIOL 323 - Introduction to Toxicology and Risk Assessment **Credits: 3**
CHEM 101 - College Chemistry I **Credits: 4**
CHEM 102 - College Chemistry II **Credits: 4**
SAFE 330 - Recognition, Evaluation, and Control of Occupational Health Hazards I **Credits: 4**
or
SAFE 430 - Recognition, Evaluation, and Control of Occupational Health Hazards II **Credits: 4**
SAFE 335 - Industrial and Environmental Stressors **Credits: 2**
SAFE 361 - Air and Water Pollution **Credits: 2**

Free Electives: 17-21

(1)

Total Degree Requirements: 120

(1) Minor or certificate recommended.

Epidemiology and Biostatistics Track, Public Health, BS

Kristi Storti, Director

The Bachelor of Science in Public Health graduate will help meet Pennsylvania's workforce needs in public health and health care related fields and will help meet the strong demand for trained public health professionals projected by national and regional studies. This degree will prepare students for jobs in health administration, community health, and health education. Upon completion of the program, students will understand the science of human physical and mental health, the epidemiology of infectious and chronic diseases as well as the complications of the US and global health care systems with regard to access and ethics of the disparities in health care delivery. The program provides students with options to focus in four academic areas: Environmental and Occupational Health, Behavioral and Mental Health, Epidemiology and Biostatistics, and Global and Rural Communities.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities:

PHIL 122 - Contemporary Moral Issues **Credits: 3**
or
PHIL 130 - Introduction to Biomedical Ethics **Credits: 3**

Mathematics:

MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**

Natural Science:

BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**
BIOL 119 - Emerging Diseases **Credits: 3**

Social Science:

Choose three courses from:

ANTH 110 - Contemporary Anthropology **Credits: 3**
or
ANTH 211 - Cultural Anthropology **Credits: 3**

GEOG 104 - World Geography: Global Context **Credits: 3**
or
RGPL 103 - Global Cities: Planning and Development **Credits: 3**

PSYC 101 - General Psychology **Credits: 3**
SOC 151 - Principles of Sociology **Credits: 3**
or
SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

Liberal Studies Electives:

ECON 122 - Principles of Microeconomics **Credits: 3**
FDNT 145 - Personal Nutrition **Credits: 3**

Public Health Core: 30-33

BIOL 301 - Fundamentals of Epidemiology **Credits: 3**
ECON 360 - Health Economics **Credits: 3**
GEOG 316 - Introduction to Geographic Information Systems **Credits: 3**
or
RGPL 316 - Introduction to Geographic Information Systems **Credits: 3**
NURS 410 - Health Promotion and Social Issues **Credits: 3**
NURS 455 - Health Care Informatics **Credits: 3**
NURS 314 - Health Policy and Law **Credits: 3**
or
ELR 314 - Health Policy and Law **Credits: 3**
PUBH 122 - Foundations of Public Health **Credits: 3**
PUBH 306 - Research Design and Analysis in Public Health **Credits: 3**
PUBH 493 - Internship in Public Health **Credits: 3-6**
SOC 442 - Medical Sociology **Credits: 3**

Concentration: Epidemiology and Biostatistics: 23

CHEM 101 - College Chemistry I **Credits: 4**
CHEM 102 - College Chemistry II **Credits: 4**
FDNT 422 - Public Health Nutrition and Epidemiology **Credits: 3**
KHSS 472 - Epidemiology of Physical Activity **Credits: 3**
MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**
MATH 411 - Univariate Data Analysis **Credits: 3**
MATH 412 - Multivariate Statistics **Credits: 3**

Free Electives: 17-21

(1)

Total Degree Requirements: 120

(1) Minor or certificate recommended.

Global and Rural Communities Track, Public Health, BS

Kristi Storti, Director

The Bachelor of Science in Public Health graduate will help meet Pennsylvania's workforce needs in public health and health care related fields and will help meet the strong demand for trained public health professionals projected by national and regional studies. This degree will prepare students for jobs in health administration, community health, and health education. Upon completion of the program, students will understand the science of human physical and mental health, the epidemiology of infectious and chronic diseases as well as the complications of the US and global health care systems with regard to access and ethics of the disparities in health care delivery. The program provides students with options to focus in four academic areas: Environmental and Occupational Health, Behavioral and Mental Health, Epidemiology and Biostatistics, and Global and Rural Communities.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities:

PHIL 122 - Contemporary Moral Issues **Credits: 3**
or
PHIL 130 - Introduction to Biomedical Ethics **Credits: 3**

Mathematics:

MATH 217 - Probability and Statistics **Credits: 3**

Natural Science:

BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**
BIOL 119 - Emerging Diseases **Credits: 3**

Social Science:

ANTH 110 - Contemporary Anthropology **Credits: 3**

or

ANTH 211 - Cultural Anthropology **Credits: 3**

GEOG 104 - World Geography: Global Context **Credits: 3**

or

RGPL 103 - Global Cities: Planning and Development **Credits: 3**

PSYC 101 - General Psychology **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

Liberal Studies Electives:

ECON 122 - Principles of Microeconomics **Credits: 3**

FDNT 145 - Personal Nutrition **Credits: 3**

Public Health Core: 30-33

BIOL 301 - Fundamentals of Epidemiology **Credits: 3**

ECON 360 - Health Economics **Credits: 3**

GEOG 316 - Introduction to Geographic Information Systems **Credits: 3**

or

RGPL 316 - Introduction to Geographic Information Systems **Credits: 3**

NURS 314 - Health Policy and Law **Credits: 3**

or

ELR 314 - Health Policy and Law **Credits: 3**

NURS 410 - Health Promotion and Social Issues **Credits: 3**

NURS 455 - Health Care Informatics **Credits: 3**

PUBH 122 - Foundations of Public Health **Credits: 3**

PUBH 306 - Research Design and Analysis in Public Health **Credits: 3**

PUBH 493 - Internship in Public Health **Credits: 3-6**

SOC 442 - Medical Sociology **Credits: 3**

Concentration: Global and Rural Communities: 21

ANTH 240 - Introduction to Global Health **Credits: 3**

SOC 454 - Dimensions of Rural Public Health **Credits: 3**

ANTH 450 - Health Disparities **Credits: 3**

or

SOC 450 - Health Disparities **Credits: 3**

GEOG 454 - GIS Analysis of Public Health **Credits: 3**

Three controlled electives (1)

Free Electives: 19-23

(2)

Total Degree Requirements: 120

(1) See advisor.

(2) Minor or certificate recommended.

College of Humanities and Social Sciences

Yaw A. Asamoah, Dean

Dorothy M. Gracey, Associate Dean

Heide Witthöft, Dean's Associate

Website: www.iup.edu/humanities

The College of Humanities and Social Sciences provides a liberal education as an essential foundation for the student's preparation for a satisfying career. The college maintains an emphasis on the fundamental understanding of our cultural heritage, combined with development of a thorough background of knowledge in the student's specific area of interest. It seeks to promote in students critical and objective thinking, analytical skills, and a keen awareness of their responsibilities to society.

College Majors

Anthropology	Philosophy
Asian Studies	Political Science
Economics	Regional Planning
English	Religious Studies
English Education	Social Science Education
Geography	Social Studies Education
History	Sociology
International Studies/Political Science	Spanish
Journalism and Public Relations	Spanish Education K-12

College Minors

Anthropology	Latin American Studies
Asian Studies	Lesbian, Gay, Bisexual, Transgender, and Queer Studies
Economics	Pan-African Studies
Geography	Philosophy
German	Political Science
History	English
Homeland Security	Regional Planning
International Studies	Spanish
Journalism and Public Relations	Religious Studies
French	Sociology of Disability Services
Sociology	Sociology/Human Services

Interdisciplinary Programs, Minors and Certificates

The interdisciplinary degree programs, minors, and certificates are multidisciplinary and are not specific to one university college. Visit [Interdisciplinary Programs](#) to view offerings and requirements.

Degrees

The departments of Anthropology, Economics, English, Foreign Languages, Geography and Regional Planning, History, Journalism and Public Relations, Philosophy, Political Science, Religious Studies, and Sociology and the Asian Studies Committee offer work leading to a bachelor of arts degree. The bachelor of science degree is offered in regional planning and public health. The bachelor of science in education is offered in English, social science, social studies, and Spanish.

Master of arts or master of science degrees are offered by Anthropology, English, Geography and Regional Planning, Political Science, and Sociology. The English and Sociology departments offer the doctor of philosophy degree. Information about these programs may be obtained from the School of Graduate Studies and Research.

Departmental Honors Tracks

Departmental honors tracks in the College of Humanities and Social Sciences enable eligible students to participate in advanced study in their disciplines. These tracks are particularly encouraged for students who intend to seek admission to graduate or professional schools.

Honors course work is recorded on university transcripts, and students completing the departmental honors tracks will be recognized at commencement ceremonies. For detailed guidance in departmental honors tracks, students should consult the description in their major department and meet with their advisors.

Junior-Year Review

A review of degree requirements is completed for all students who are candidates for a degree offered by the college. The purpose of the review is to verify that a student is on track to meet graduation requirements by his/ her anticipated graduation date. Completed junior-year review reports must be approved by the department Chair and the dean's associate.

It remains the student's responsibility to apply for graduation by the announced deadline. Failure to meet the graduation application deadline may result in a delay in the student's graduation.

College Foreign Language Requirements

Students whose primary major is in the College of Humanities and Social Sciences must complete up through the 12th credit of a foreign language sequence. They may choose any of the languages offered, including the self-instruction in the Critical Languages program. Some courses taught in the traditional format (Chinese, French, German, Japanese, Spanish) also count toward Liberal Studies electives. Courses in American Sign Language and computer languages do not count toward the college language requirement.

For students with previous foreign language instruction or experience, individual placement into foreign language courses may be done during placement testing and registration before the first semester at IUP. Students may also take a placement exam before, but not after, beginning course work in a particular language. Students who place into classes beyond the 12th credit within a foreign language are considered to have met the language requirement. Students who place beyond the introductory course, but not beyond the 12th credit, are only required to complete through the 12th credit. For example, the first courses in the Spanish curriculum are three 4-credit classes: SPAN 101, SPAN 102, and SPAN 201. A student who

places into SPAN 102 would only need to pass SPAN 102 and SPAN 201 in order to meet the language requirement. Students with no previous foreign language background will take entry-level courses, which may be counted as free electives in the total required for graduation.

Any undergraduate international student, registered as such at IUP, whose acquired native language is other than English and who demonstrates an acceptable proficiency in English, is exempt from the foreign language requirement if the department of the student's major does not require a specific foreign language. Also, any student with a secondary major in the college whose primary major does not require foreign language does not need to complete the college-level requirement.

Degree Requirements

In addition to the university's Liberal Studies requirements, students seeking a baccalaureate degree in this college must complete the requirements for a major as established by the department through which they wish to specialize. Statements of these requirements, and the requirements for those minoring in a specific field, appear in the department sections that follow. A dual baccalaureate degree or double major or minor may encompass a discipline outside as well as within the college but should be selected only with advisor approval. As a general principle, there is considerable latitude in course choice for Humanities and Social Sciences majors. The intermediate-level foreign language requirement applies without exception to all Humanities and Social Sciences four-year degree programs.

Critical Languages Program

The Critical Languages program is a self-instructional/tutorial approach to less commonly taught foreign languages. Students meet with a tutor three hours per week in addition to practicing with audio cassettes. Most tutors are native speakers of the language. Professional teachers of the specific language may be brought in from other universities to evaluate student performance. The final grade is based on final examination as well as on performance during the tutorial sessions. Interested students must contact the coordinator before registration. Each course carries 3 credits.

The following languages may be available for study: Arabic, Dutch, Finnish, Modern Greek, Hebrew, Hindi, Hungarian, Korean, Portuguese, Russian, Swahili, and Swedish.

Internship Programs

Humanities and Social Sciences departments encourage internship programs that allow students to engage in supervised experiences in a work setting related to their personal career goals, giving them the benefits of mentoring and coaching from professionals in the discipline. Students have completed internships in a number of settings, from legislative offices in Harrisburg and Washington, DC, to offices at the county level including county planning and development offices and children and youth services, Common Pleas Court to human services agencies such as Head Start and Lifesteps. When completed for academic credit, students will complete a project and/or a final paper that is approved by a faculty internship supervisor. For more information about specific internship programs, students should consult with the Chair of the department in which the student is majoring/minoring.

Foreign Study Programs

College majors may be interested in the various foreign study programs and tours offered. Credits obtained through such arrangements normally are applicable toward a Humanities and Social Sciences degree. Also of interest are the college's credit-awarding programs at Valladolid (Spain) and Nancy (France), as well as the Summer Study in Mexico program.

IUP at Costa Rica Summer Program: The Department of Foreign Languages has established a four-week study program at the National University of Costa Rica, located in Heredia. Participants live with Costa Rican families and take classes at the university. This program is intended for students who are going abroad for the first time, and preference is given to beginning students. Participants earn 4 transfer credits in Spanish from the UNA. For details and brochures, contact the Department of Foreign Languages.

IUP at Mexico Summer Program: The Department of Foreign Languages sponsors a program of study in Spanish language in Mexico. The program is located at Cuernavaca, and the cost of the program includes transportation, complete room and board, insurance, and tuition. The student may earn up to 6 credits of undergraduate or graduate credit. Internship opportunities are available for students with fluency in Spanish. For details and brochures, contact the Department of Foreign Languages.

IUP at Nancy: IUP has established a study program with the University of Nancy, France. Participants in the Nancy program must pay a foreign exchange fee for each semester in the program. For details, contact the Department of Foreign Languages.

IUP at Valladolid: Through the Department of Foreign Languages, the university has offered a spring semester of study at the University of Valladolid, Spain, for more than 40 years. The participants live in private homes. For details, contact the Department of Foreign Languages.

Anthropology

Website: www.iup.edu/anthropology

Ben Ford, Chair

The Anthropology Department promotes awareness of anthropological knowledge and methods and seeks to further the discipline and its applications to the problems of the contemporary world. Through teaching, research, and involvement in campus and community events and programs, the Anthropology faculty members contribute to the liberal education of IUP students. The anthropology major itself equips students with knowledge and skills needed for full participation in the global environment of the 21st century.

Anthropology emphasizes the study of human biological and cultural diversity within its four subfields: sociocultural anthropology, biological anthropology, linguistic(s) anthropology, and archaeology. All students receive a solid foundation in the discipline of anthropology and tailor their major to specific interests by following one of the two tracks.

Bachelor of Arts

Applied Anthropology Track, Anthropology, BA

Applied anthropology focuses on the anthropologist as an agent of social change and bridges the gap between theories of cultural behavior and the policies that affect contemporary cultures. The Applied Anthropology Track provides students with a background in anthropological method and theory, a cross-cultural perspective, and an avenue to translate this knowledge into action through internships and research. Contemporary applied anthropologists work in international development, health, human rights, business and marketing, the environment, education, and as advocates for marginalized communities. In consultation with an advisor, each student will develop their own curriculum to build expertise in a specific topical area.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 217 - Probability and Statistics **Credits:** 3

Social Science:

GEOG 104 - World Geography: Global Context **Credits:** 3 (recommended)

Liberal Studies Electives: 6

No courses with ANTH prefix

College: 0-8

Foreign Language Intermediate Level (1)

Major: 36

Required Courses:

ANTH 211 - Cultural Anthropology **Credits: 3**
ANTH 222 - Biological Anthropology **Credits: 3**
ANTH 233 - Language and Culture **Credits: 3**
ANTH 244 - Basic Archaeology **Credits: 3**

Two methods courses:

ANTH 456 - Ethnographic Research Methods **Credits: 3**
ANTH 457 - Applied Anthropology **Credits: 3**

One theory course:

ANTH 480 - Anthropology Seminar **Credits: 1-3**

Controlled Electives:

One area course from the following:

ANTH 271 - Cultural Area Studies: Africa **Credits: 3**
ANTH 272 - Culture Area: China **Credits: 3**
ANTH 274 - Cultural Area Studies: Latin America **Credits: 3**
ANTH 314 - Contemporary Native American Cultures **Credits: 3**
ANTH 370 - Latinos and Diasporas **Credits: 3**

One ANTH elective (any level) **Credits: 3**
One ANTH elective (300-400 level) **Credits: 3**

ANTH 493 - Internship in Anthropology **Credits: 3-12 (2)**
or
ANTH 460 - Ethnographic Field School **Credits: 6 (2)**

Free Electives: 26-38

(3)

Total Degree Requirements: 120

(1) Intermediate-level foreign language may be included in Liberal Studies electives.

(2) An internship or ethnographic field school is highly desirable but may be replaced by 3-6cr of pragmatic skill courses upon approval of the advisor.

(3) State System Board of Governors policy states that at least 40 percent of the course work in a degree must consist of courses numbered 300 and above.

Archaeology Track, Anthropology, BA

The Archaeology Track provides an emphasis on the study of culture through the material remains of human behavior. This track provides training for careers in the growing fields of cultural resource management and historic preservation, with opportunities for employment in both government

and the private sector. This track is the preferred option for students intending to pursue archaeology at the graduate level as well. Students in this track take archaeological methods, theory, and area courses as well as anthropology core courses and electives. A wide variety of internship opportunities provide hands-on training in these areas.

Liberal Studies: 46-47

As outlined in Liberal Studies Requirements with the following specifications

Mathematics:

MATH 217 - Probability and Statistics **Credits:** 3

Natural Science:

Geoscience courses recommended (1)

Social Science:

ANTH 213 - World Archaeology **Credits:** 3 (required)

GEOG 104 - World Geography: Global Context **Credits:** 3 (recommended)

Liberal Studies Electives: 6

No courses with ANTH prefix

College: 0-8

Foreign Language Intermediate Level (2)

Major: 36

Required Courses:

ANTH 211 - Cultural Anthropology **Credits:** 3

ANTH 213 - World Archaeology **Credits:** 3

ANTH 222 - Biological Anthropology **Credits:** 3

ANTH 233 - Language and Culture **Credits:** 3

ANTH 244 - Basic Archaeology **Credits:** 3

Controlled Electives:

Three Methods Courses:

ANTH 320 - Archaeological Field School **Credits:** 6 (4, 5)

ANTH 325 - Archaeological Lab Methods **Credits:** 3

ANTH 415 - Cultural Resource Management **Credits:** 3

Two Theory Courses:

ANTH 425 - Archaeological Theory and Research Design **Credits:** 3

One Archaeology Area Course

Such as

- ANTH 315 - North American Archaeology **Credits:** 3
- ANTH 323 - Mesoamerican Archaeology **Credits:** 3
- ANTH 333 - The Archaeology of Early China **Credits:** 3

Any Two Anthropology Courses from the Following:

- ANTH 250 - Human Origins **Credits:** 3
- ANTH 271 - Cultural Area Studies: Africa **Credits:** 3
- ANTH 272 - Culture Area: China **Credits:** 3
- ANTH 274 - Cultural Area Studies: Latin America **Credits:** 3
- ANTH 310 - Voyages of Discovery **Credits:** 3
- ANTH 314 - Contemporary Native American Cultures **Credits:** 3
- ANTH 318 - Museum Methods **Credits:** 3
- ANTH 370 - Latinos and Diasporas **Credits:** 3
- ANTH 420 - Environmental Anthropology **Credits:** 3
- ANTH 470 - Environmental Archaeology **Credits:** 3
- ANTH 484 - Specialized Methods in Archaeology **Credits:** 3 (5)
- ANTH 486 - Historic Artifacts **Credits:** 3
- ANTH 487 - Geoarchaeology **Credits:** 3
- ANTH 488 - Geophysical Applications in Archaeology **Credits:** 3
- ANTH 489 - Prehistoric Technologies of Eastern North America **Credits:** 3
- ANTH 490 - Applied Spatial Methods in Archaeology **Credits:** 3
- ANTH 491 - Zooarchaeology **Credits:** 3
- ANTH 492 - Soil Science: Archaeological and Geoenvironmental Applications **Credits:** 3
- ANTH 496 - Human Osteology **Credits:** 3
- ANTH 497 - Forensic Anthropology **Credits:** 3

Free Electives: 29-38

(6, 7)

Total Degree Requirements: 120

- (1) Determine the specific courses in consultation with academic advisor.
- (2) Intermediate-level foreign language may be included in Liberal Studies electives.
- (3) Courses counted toward Liberal Studies credits do not receive duplicate credit in major.
- (4) With department approval, an equivalent field school with lab component from another university may be used.
- (5) May be repeated for credit with departmental approval but may only count once toward the requirements of the Archaeology Track.
- (6) A minor in geoscience, geography, history, or other approved field is recommended. An internship (ANTH 493) also is recommended. The student's advisor should be consulted.
- (7) State System Board of Governors policy states that at least 40 percent of the course work in a degree must consist of courses numbered 300 or above.

Minor

Anthropology Minor

A minor in Anthropology allows students to apply the benefits of broad cross-cultural training to their chosen field of study. This minor is particularly helpful for students interested in international or global careers, or those who wish to apply the lessons of the past to their future pursuits. The 18-credit minor allows the flexibility to select the classes that best fit the student's interest.

Required Course:

ANTH 110 - Contemporary Anthropology **Credits: 3**

Controlled Requirements: 3

One core course from the following:

ANTH 211 - Cultural Anthropology **Credits: 3**

ANTH 222 - Biological Anthropology **Credits: 3**

ANTH 233 - Language and Culture **Credits: 3**

ANTH 244 - Basic Archaeology **Credits: 3**

Controlled Electives: 12

Four additional courses in ANTH with at least 6cr 300 level or higher

Total Minor Requirements: 18

Certificate and Certification Programs

Cultural Competencies Certificate

The Cultural Competencies Certificate prepares you for life and professional practice in culturally diverse settings. The world is now global, and the Cultural Competencies Certificate assists you in adopting a critical and self-reflective approach to differences in identity, as defined by, for example, race, ethnicity, gender, class, age, religion, ability, and sexual orientation. Since several of these identities are combined in any culture, the certificate allows you to select a series of courses that best meet your needs and careers. The certificate provides the knowledge, skills, and attitudes to increase your effectiveness in relating across cultural differences and in increasingly diverse environments in the country and abroad. The core courses establish the foundations needed to appreciate diversity and cultural competency, while the electives allow you to explore the facets of diversity that will best prepare you for life in your global workplace.

Core Courses: 3

ANTH 110 - Contemporary Anthropology **Credits: 3**

or

ANTH 211 - Cultural Anthropology **Credits: 3**

One Culture Area Course: 3

ANTH 271 - Cultural Area Studies: Africa **Credits: 3**

ANTH 272 - Culture Area: China **Credits: 3**

ANTH 274 - Cultural Area Studies: Latin America **Credits: 3**

ANTH 314 - Contemporary Native American Cultures **Credits: 3**

ANTH 370 - Latinos and Diasporas **Credits: 3**

Electives: 6

ANTH 213 - World Archaeology **Credits: 3**
ANTH 240 - Introduction to Global Health **Credits: 3**
ANTH 316 - Anthropology of Religion **Credits: 3**
ANTH 350 - Anthropology of Gender **Credits: 3**
ANTH 352 - The Anthropology of Human Rights **Credits: 3**
ANTH 420 - Environmental Anthropology **Credits: 3**
ANTH 444 - Medical Anthropology **Credits: 3**

ANTH 450 - Health Disparities **Credits: 3**

or

SOC 450 - Health Disparities **Credits: 3**

ASIA 200 - Introduction to Asian Studies **Credits: 3**
BCOM 342 - Intercultural Business Communication **Credits: 3**
COMM 230 - Global Media and Communication **Credits: 3**
CRIM 410 - Race, Ethnicity, Social Structure, and Crime **Credits: 3**
ECON 338 - Poverty in Africa **Credits: 3**
EDUC 499 - Multicultural/Multiethnic Education **Credits: 2**
ENGL 336 - Language, Gender, and Society **Credits: 3**
ENGL 344 - Ethnic American Literature **Credits: 3**
ENGL 348 - African American Literature **Credits: 3**
ENGL 350 - Gender and Sexual Orientation in Literature, Theory, and Film **Credits: 3**
FDNT 470 - Human Food Consumption Patterns **Credits: 3**
GEOG 104 - World Geography: Global Context **Credits: 3**
GEOG 230 - Cultural Geography **Credits: 3**
HIST 331 - Modern Middle East **Credits: 3**
HIST 338 - The History of Iran **Credits: 3**
HIST 365 - History of Black America since Emancipation **Credits: 3**
HIST 369 - Women in America **Credits: 3**
HIST 434 - Modern China 1800-present **Credits: 3**
HIST 437 - Modern Japan 1850-Present **Credits: 3**
JRNL 375 - World News Coverage **Credits: 3**

LAS 481 - Special Topics in Latin American Studies **Credits: 1-3**

LAS 350 - The Mayas: Culture, Literature, and Numbers **Credits: 3**
LAS 480 - Latin American Studies Seminar **Credits: 3**
LGBT 200 - Introduction to Lesbian, Gay, Bisexual, Transgender, and Queer Studies **Credits: 3**
LGBT 400 - Queer Theory **Credits: 3**

MGMT 350 - International Business **Credits: 3**

or

MKTG 350 - International Business **Credits: 3**

NURS 410 - Health Promotion and Social Issues **Credits: 3**
PNAF 131 - Introduction to Pan-African Studies **Credits: 3**
RLST 110 - World Religions **Credits: 3**
RLST 245 - Women and Religion **Credits: 3**
RLST 360 - African Religions **Credits: 3**
RLST 365 - Native North American Religions **Credits: 3**
RLST 370 - Religions: China and Japan **Credits: 3**
RLST 374 - Buddhism **Credits: 3**
RLST 375 - Religions of India **Credits: 3**
RLST 378 - Hinduism **Credits: 3**
RLST 380 - Islam **Credits: 3**

RLST 385 - Christianity **Credits:** 3
RLST 402 - Topics in Asian Religions **Credits:** 3
RLST 403 - Topics in Indigenous Religions **Credits:** 3
SOC 314 - Sociology of Native Americans **Credits:** 3
SOC 361 - Social Stratification **Credits:** 3
SOC 362 - Racial and Ethnic Minorities **Credits:** 3
SOC 363 - Sociology of Gender **Credits:** 3
SOC 417 - Global Service Learning **Credits:** 3
SOC 452 - Disability and Society **Credits:** 3
SPAN 244 - Modern Mexico **Credits:** 3
SPAN 342 - Spanish Cultures from the 19th Century to the Present **Credits:** 3
SPAN 344 - Spanish-American Cultures from the 19th Century to the Present **Credits:** 3
WGS 200 - Introduction to Women's and Gender Studies **Credits:** 3
WGS 301 - Asian American and Asian Diasporic Women's Literature **Credits:** 3
WGS 400 - Feminist Theories **Credits:** 3

Total Certificate Requirements: 12

Other Degrees

Anthropology Honors Program

The honors program is open by departmental permission to declared anthropology majors with a minimum 3.25 cumulative GPA and a 3.25 GPA in ANTH courses. Students who are thinking about attending graduate school in anthropology are encouraged to consider applying for this track. Students complete 6 credits of ANTH 483 Honors Thesis in Anthropology and two other honors courses. Students also may substitute graduate courses approved by the department for the two other honors courses if they meet the graduate school's requirements for undergraduates taking graduate level courses. To determine what courses they should take, as well as how Honors Track courses will be integrated into existing requirements for the anthropology major, students must consult closely with their advisors.

To apply, students must petition the department honors committee for admission no earlier than the second semester of their sophomore year. An application must be filed with the chairperson of the Department of Anthropology and should include an application form, a letter of intent, a description of the work plan, a full transcript, and two letters of recommendation from faculty members.

Prerequisites:

Declared major in anthropology, completion of 60cr, and permission of department honors committee, academic advisor, and department chair

Required Courses:

ANTH 483 - Honors Thesis **Credits:** 1-6 (Honors)
Two other honors courses **Credits:** 6 (1)

Total Honors Requirements: 12

(1) Students also may substitute graduate courses approved by the department for the two other honors courses if they meet the graduate school's requirements for undergraduates taking graduate-level courses.

Economics

Website: www.iup.edu/economics
David B. Yerger, Chair

Economics provides a background and educational base that open a broad range of professional, educational, and vocational opportunities. As part of a Humanities and Social Sciences degree, a bachelor of arts degree program in economics provides a liberal arts education, as well as professional and technical training. Indeed, many students completing an undergraduate major in economics do not pursue careers as professional economists; they enter such fields as law, management, finance, and labor relations. By helping to develop a student's ability to think and communicate, economics provides a firm foundation upon which the student can build any one of a large number of possible careers.

The bachelor of arts program in economics prepares students for immediate employment or graduate school in economics, business, policy analysis, and law. Students interested in law are encouraged to do the pre-law minor.

Either ECON 101 or ECON 121 counts as a Liberal Studies social science course. However, ECON 101 is intended for students who will take only one course in the field. Students who anticipate taking more than one economics course should schedule ECON 121. ECON 101 will not count toward either a major or minor in economics and may not be taken after the successful completion of, or in concurrent registrations with, any other economics course.

Economics majors are encouraged to minor in one of the other social sciences, business administration, mathematics, or applied statistics.

Bachelor of Arts

Economics , BA

Liberal Studies: 47-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 121 - Calculus I for Natural and Social Sciences **Credits:** 4 (1)

Social Science:

ECON 121 - Principles of Macroeconomics **Credits:** 3

Liberal Studies Electives: 6

No courses with ECON prefix

College: 0-8

Foreign Language Intermediate Level (2)

Major: 27

Required Courses:

ECON 122 - Principles of Microeconomics **Credits:** 3

ECON 355 - Statistics for Economists **Credits:** 3 (3)

ECON 421 - Macroeconomic Analysis **Credits:** 3

ECON 422 - Microeconomic Analysis **Credits:** 3

Controlled Electives:

Five other ECON courses **Credits:** 15 (4, 5, 6)

Free Electives: 37-46

Total Degree Requirements: 120

- (1) MATH 115 or MATH 125 may be substituted for MATH 121.
- (2) Intermediate-level foreign language may be included in Liberal Studies electives.
- (3) MATH 214, MATH 216, MATH 217, or MATH 363 may be substituted for ECON 355.
- (4) No more than 6cr of internship credit may be applied toward major.
- (5) No more than two ECON controlled electives may be 200-level courses.
- (6) Neither ECON 101 nor ECON 143 counts as an ECON controlled elective.

Minor

Economics Minor

Required Courses:

ECON 121 - Principles of Macroeconomics **Credits:** 3
ECON 122 - Principles of Microeconomics **Credits:** 3

Controlled Electives: 12

Four courses from ECON 200 or higher with at least 6cr 300-level or higher (1, 2)

Total Minor Requirements: 18

- (1) MATH 214, MATH 216, MATH 217, or another quantitative class approved by the chairperson may be substituted for ECON 355. If one of the previously noted MATH classes is substituted for ECON 355, it will not count as a 300-level or higher course.
- (2) Neither ECON 101 nor ECON 143 counts as an ECON controlled elective.

Other Degrees

Economics Honors Program

The honors program is open by departmental permission to economics and economics/pre-law majors in the College of Humanities and Social Sciences with a minimum 3.25 cumulative GPA and a 3.25 GPA in economics courses. Students complete ECON 355*, ECON 356/H/, and ECON 456/W/. In addition, students must choose one class from the following: CRIM 306, FIN 310, FIN 315, GEOG 316/RGPL 316, HIST 487 /H/, MATH 371, MATH 411, MATH 412, MATH 416, PLSC 370, PLSC 422, or SOC 460 . Students must earn at least a grade of "C" in each course completed for the track. Students should consult their advisors to determine how Honors Track courses may be integrated into existing requirements for the economics or economics/pre-law majors.

*In practice, MATH 214, MATH 216, or MATH 217 can be substituted for ECON 355.

To apply, complete the Economics Honors Track form, which is available in the Department of Economics office. In addition, a change of major form must be filed.

Required Courses: 9

ECON 355 - Statistics for Economists **Credits: 3 (1)**
ECON 356 - Introduction to Econometrics **Credits: 3 (Honors)**
ECON 456 - Advanced Econometrics **Credits: 3**

One Course from the Following:

CRIM 306 - Criminological Research Methods **Credits: 3**
FIN 310 - Fundamentals of Finance **Credits: 3**
FIN 315 - Financial Analysis Using Electronic Spreadsheets **Credits: 3**
GEOG 316 - Introduction to Geographic Information Systems **Credits: 3**
or
RGPL 316 - Introduction to Geographic Information Systems **Credits: 3**
MATH 341 - Differential Equations **Credits: 3**
MATH 363 - Mathematical Statistics I **Credits: 3**
MATH 371 - Linear Algebra **Credits: 3**
MATH 411 - Univariate Data Analysis **Credits: 3**
MATH 412 - Multivariate Statistics **Credits: 3**
MATH 416 - Time Series Analysis **Credits: 3**
PLSC 370 - The Practice of Public Administration **Credits: 3**
PLSC 422 - International Law and Organizations **Credits: 3**
SOC 460 - Social Research Methods I **Credits: 3**

Total Honors Requirements: 12

(1) MATH 214, MATH 216, or MATH 217 may be substituted for ECON 355.

English

Website: www.iup.edu/english

Gian S. Pagnucci, Chair

The program of studies in the English Department at IUP focuses on critical thinking and effective reading and writing at all levels. English majors study a wide variety of subjects ranging from literary theory to practical pedagogy in an atmosphere that encourages and fosters a high degree of professional commitment.

The English Department's bachelor of arts degree program in English reflects the diversity of subject matter, methods, and purposes of this vital, constantly evolving field. BA majors will have the opportunity to pursue the traditional concern of literary study—the careful analysis of canonized works—as well as encounter and analyze texts by members of traditionally marginalized groups and texts that are nontraditional or innovative in form and content. The department encourages students to design their course of study so that they can be active and capable members of the global community and effective contributors to the multicultural workplace. To these ends, the department is committed to promoting and supporting an intellectual environment in which minority writers, nontraditional texts, and a variety of critical perspectives are an integral part of the curriculum.

After completing the introductory course in English (ENGL 122), all BA majors will take a core of 15 credits: 6 credits of historical/regional literary survey courses; 3 credits of a writing course; 3 credits of a rhetoric, speech, or linguistics course; and 3 credits of an upper-level capstone course. In addition to these core courses, all BA majors will take 6 credits of English elective courses and declare a track of 15 credits, chosen from the following: Writing Studies or Pre-law.

Since the BA program can be completed with 36 credits of course work, students will have 25-31 credits outside of the Liberal Studies requirements to develop other interests, including a second major or a minor. In addition to creating these sorts of academic connections, the department

encourages its students to explore and enhance links between their scholarship and their professional goals by seeking an internship in their junior or senior year. Students should explore their options carefully with their advisors.

Bachelor of Arts

Literature/Culture Track, English, BA

The Literature/Culture Track enables students to design a course of study in the history, meaning, function, and aesthetics of texts of all kinds. A student who completes this major will be able to identify the unique material, symbolic, formal, and aesthetic qualities of texts; apply the analytical skills and methods best suited to comprehend the significance of texts; analyze the ways that texts interact with audience, culture, medium, and ideology; evaluate the role of theory—its methods, history, politics, and functions—in textual analysis; and examine the ways in which questions of race, gender, sexual orientation, and identity affect interactions with both traditional and nontraditional texts and theory. The Literature/Culture Track prepares students for any profession that requires strong analytic, communication, cultural, and aesthetic skills, and for academic study in literary and cultural studies.

Liberal Studies: 46

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities-Literature:

ENGL 122 - Introduction to English Studies **Credits: 3**

Mathematics: 3

Liberal Studies Electives: 6

No courses with ENGL prefix

College: 0-6

Foreign Language Intermediate Level (1)

Major: 36

Required Courses:

Literary Survey Courses: 6

Two literary survey courses from the following:

- ENGL 210 - British Literature to 1660 **Credits: 3**
- ENGL 211 - British Literature to 1660-1900 **Credits: 3**
- ENGL 212 - American Literature: Beginnings to 1900 **Credits: 3**
- ENGL 213 - British and American Literature Since 1900 **Credits: 3**
- ENGL 226 - Survey of Global Literature Since 1900 **Credits: 3**

Writing Course: 3

One writing course from the following:

- ENGL 220 - Advanced Composition **Credits: 3**

ENGL 221 - Creative Writing **Credits: 3**
ENGL 222 - Technical Writing **Credits: 3**

Literacies Course: 3

One literacies course from the following:

ENGL 208 - Introduction to Film Studies **Credits: 3**
ENGL 308 - Critical Theory **Credits: 3**
ENGL 313 - Rhetorical Trends and Traditions **Credits: 3**

Capstone course:

ENGL 484 - Topics in English Studies **Credits: 3**

Controlled Electives:

(2, 3)

Four Courses from the Following: 12

ENGL 203 - Introduction to Language Studies **Credits: 3**
ENGL 208 - Introduction to Film Studies **Credits: 3**
ENGL 210 - British Literature to 1660 **Credits: 3**
ENGL 211 - British Literature to 1660-1900 **Credits: 3**
ENGL 212 - American Literature: Beginnings to 1900 **Credits: 3**
ENGL 213 - British and American Literature Since 1900 **Credits: 3**
ENGL 225 - Introduction to Literature by Women **Credits: 3**
ENGL 226 - Survey of Global Literature Since 1900 **Credits: 3**
ENGL 265 - Law and Literature **Credits: 3**
ENGL 308 - Critical Theory **Credits: 3**
ENGL 310 - Public Speaking **Credits: 3**
ENGL 313 - Rhetorical Trends and Traditions **Credits: 3**
ENGL 328 - Introduction to Linguistics **Credits: 3**
ENGL 329 - The History of the English Language **Credits: 1**
ENGL 332 - Film Genres **Credits: 3**
ENGL 335 - Literary Nonfiction **Credits: 3**
ENGL 336 - Language, Gender, and Society **Credits: 3**
ENGL 337 - Myth **Credits: 3**
ENGL 341 - Poetry **Credits: 3**
ENGL 342 - Short Fiction **Credits: 3**
ENGL 343 - Drama **Credits: 3**
ENGL 344 - Ethnic American Literature **Credits: 3**
ENGL 348 - African American Literature **Credits: 3**
ENGL 350 - Gender and Sexual Orientation in Literature, Theory, and Film **Credits: 3**
ENGL 361 - Environmental Literature **Credits: 3**
ENGL 398 - Global Genres **Credits: 3**
ENGL 434 - Shakespeare **Credits: 3**
ENGL 436 - Major American Authors **Credits: 3**
ENGL 440 - Major Figures in Film **Credits: 3**
ENGL 450 - Film Theory **Credits: 3**
ENGL 460 - Topics in Film **Credits: 3**
ENGL 463 - Topics in Global Literature and Film **Credits: 3**
ENGL 493 - Internship **Credits: 3-12**

ENGL Prefix: 9

Three courses with ENGL prefix except

ENGL 100 - Basic Writing **Credits: 3**

ENGL 101 - Composition I **Credits: 3**

ENGL 121 - Humanities Literature **Credits: 3**

ENGL 122 - Introduction to English Studies **Credits: 3**

ENGL 202 - Composition II **Credits: 3**

Free Electives: 31-38

Total Degree Requirements: 120

(1) Intermediate-level foreign language may be included in Liberal Studies electives.

(2) An internship, aside from counting for up to 6cr toward the major, makes the BA degree recipient much more employable by providing job experience. Students should see the English BA internship director for advice about available openings.

(3) Courses used to fulfill core requirements cannot also be used to fulfill track requirements.

Writing Studies Track, English, BA

The Writing Studies Track enables students to design a course of study in the theory and practice of writing in a variety of genres. A student who completes this track will be able to demonstrate skills in the analysis, construction, and presentation of texts; to identify and apply productive, effective, and creative approaches to writing tasks for diverse audiences; and to create a portfolio of writing for use in applying to graduate programs or for professional positions. The Writing Studies Track prepares students for any career that requires professional writing skills.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities-Literature:

ENGL 122 - Introduction to English Studies **Credits: 3**

Mathematics: 3

Liberal Studies Electives: 6

No courses with ENGL prefix

College: 0-8

Foreign Language Intermediate Level (1)

Major: 36

Required Courses:

Literary Survey Courses: 6

Two literary survey courses from the following:

ENGL 210 - British Literature to 1660 **Credits: 3**
ENGL 211 - British Literature to 1660-1900 **Credits: 3**
ENGL 212 - American Literature: Beginnings to 1900 **Credits: 3**
ENGL 213 - British and American Literature Since 1900 **Credits: 3**
ENGL 226 - Survey of Global Literature Since 1900 **Credits: 3**

Writing Course: 3

One writing course from the following:

ENGL 220 - Advanced Composition **Credits: 3**
ENGL 221 - Creative Writing **Credits: 3**
ENGL 222 - Technical Writing **Credits: 3**

Language Course: 3

One language course from the following:

ENGL 208 - Introduction to Film Studies **Credits: 3**
ENGL 308 - Critical Theory **Credits: 3**
ENGL 313 - Rhetorical Trends and Traditions **Credits: 3**

Capstone course:

ENGL 484 - Topics in English Studies **Credits: 3**

Controlled Electives:

(2)

Craft and Genre: 6

Two courses from craft and genre:

ENGL 220 - Advanced Composition **Credits: 3**
ENGL 221 - Creative Writing **Credits: 3**
ENGL 222 - Technical Writing **Credits: 3**
ENGL 321 - Persuasive Speech and Writing **Credits: 3**
ENGL 325 - Writing Poetry **Credits: 3**
ENGL 326 - Writing Fiction **Credits: 3**
ENGL 327 - Writing Creative Nonfiction **Credits: 3**
ENGL 422

ENGL 347 - Playwriting **Credits: 3**

or

THTR 347 - Playwriting **Credits: 3**

Forms and Theories: 3

One course from Forms and Theories:

ENGL 308 - Critical Theory **Credits: 3**
ENGL 335 - Literary Nonfiction **Credits: 3**
ENGL 341 - Poetry **Credits: 3**
ENGL 342 - Short Fiction **Credits: 3**
ENGL 343 - Drama **Credits: 3**
ENGL 450 - Film Theory **Credits: 3**

Studio/Portfolio/Career Preparation: 6

Two courses from Studio/Portfolio/Career Preparation:

ENGL 360 - Editing and Publishing **Credits: 3**

ENGL 420 - Writers' Studio **Credits: 3**

ENGL 483 - Honors Thesis **Credits: 1-6**

ENGL 493 - Internship **Credits: 3-12**

ENGL Prefix: 6

Two courses with ENGL prefix except

ENGL 100 - Basic Writing **Credits: 3**

ENGL 121 - Humanities Literature **Credits: 3**

ENGL 122 - Introduction to English Studies **Credits: 3**

ENGL 202 - Composition II **Credits: 3**

Free Electives: 29-38

Total Degree Requirements: 120

(1) Intermediate-level foreign language may be included in Liberal Studies electives.

(2) An internship, aside from counting for up to 6cr toward the major, makes the BA degree recipient much more employable by providing job experience. Students should see the English BA internship director for advice about available openings.

Bachelor of Science in Education

English Education, BSED

The English Department offers a program leading to the Bachelor of Science in Education degree program in English education. This program has been accredited by the Council for the Accreditation of Educator Preparation. Graduates are prepared to teach in middle, junior high, and senior high schools.

English education majors fulfill all the requirements for state certification, including practical experience in methods courses and student teaching; content preparation in a variety of literature, language, and composition courses; and philosophical background in current theories of teaching. Although most students choosing the English education major will be best prepared for the secondary school classroom, those who opt not to teach will find that their speaking, writing, and management skills may also be useful to the media, governmental services, and business.

Program requirements are available at the English Department office and in the *English Education Handbook*. Majors must maintain a minimum cumulative GPA of 3.0. They must be formally admitted to English Education, a process that includes application and screening within the English Department as well as an application to the teacher certification program in the College of Education and Communications. This screening involves review of the student's portfolio of written work and faculty evaluations as well as an interview with English education faculty. Refer to the section "Admission to Teacher Education and Certification" in the College of Education and Communications section of this catalog and the *English Education Handbook*.

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education" in the College of Education and Communications section of section of this catalog.

Liberal Studies: 43-44

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities-Literature:

ENGL 122 - Introduction to English Studies **Credits:** 3

Mathematics: 3

MATH 101 - Foundations of Mathematics **Credits:** 3 or higher

Social Science:

PSYC 101 - General Psychology **Credits:** 3

Liberal Studies Elective: 3

MATH (1)
No courses with ENGL prefix

College: 6

Foreign Language Intermediate Level or Free Electives

College: 30

Preprofessional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits:** 3
EDSP 102 - Educational Psychology **Credits:** 3

Professional Education Sequence:

EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits:** 2
EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits:** 3
or
EDSP 577 - Inclusive Secondary Settings Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits:** 2

EDUC 242 - Pre-student Teaching Clinical Experience I **Credits:** var-1
EDUC 342 - Pre-student Teaching Clinical Experience II **Credits:** 1
CHSS 343 - Applied Practice in Secondary English Language Arts **Credits:** 1
EDUC 441 - Student Teaching **Credits:** 5-12
EDUC 442 - School Law **Credits:** 1
EDUC 452 - Teaching of English and Communication in the Secondary School **Credits:** 3

Major: 43

Required Courses:

ENGL 212 - American Literature: Beginnings to 1900 **Credits:** 3
ENGL 220 - Advanced Composition **Credits:** 3
ENGL 314 - Speech and Communication in the Secondary English Classroom **Credits:** 3
ENGL 323 - Teaching Literature and Reading in the Secondary School **Credits:** 3

ENGL 324 - Teaching and Evaluating Writing **Credits: 3**
ENGL 329 - The History of the English Language **Credits: 1**
ENGL 415 - English Language Studies for Teachers **Credits: 3**
or
ENGL 515 English Language Studies for Teachers **Credits: 3**

ENGL 418 - Young Adult Literature **Credits: 3**
or
ENGL 518 - Young Adult Literature **Credits: 3**

ENGL 426 - ESL Methods and Materials **Credits: 3**
or
ENGL 526 - ESL Methods and Materials **Credits: 3**

ENGL 434 - Shakespeare **Credits: 3**

Controlled Electives:

(2)

One Film Studies Track course **Credits: 3**
One Literature/Cultural Track course **Credits: 3**
One general English elective (any track) **Credits: 3**

British Literature Survey

One British literature survey course from
ENGL 210 - British Literature to 1660 **Credits: 3**
ENGL 211 - British Literature to 1660-1900 **Credits: 3**

Literature/Cultural Track:

Choose one course from the following LC Track:

ENGL 213 - British and American Literature Since 1900 **Credits: 3**
ENGL 225 - Introduction to Literature by Women **Credits: 3**
ENGL 226 - Survey of Global Literature Since 1900 **Credits: 3**
ENGL 344 - Ethnic American Literature **Credits: 3**
ENGL 348 - African American Literature **Credits: 3**
ENGL 350 - Gender and Sexual Orientation in Literature, Theory, and Film **Credits: 3**
ENGL 398 - Global Genres **Credits: 3**
ENGL 437
ENGL 463 - Topics in Global Literature and Film **Credits: 3**

Total Degree Requirements: 122-123

(1) The second MATH course is a teacher certification requirement and counts as Liberal Studies elective credits for mathematics.

(2) One of the controlled English-elective track courses (either the Literature/ Cultural Track or the general English elective from any track) must be a Global and Multicultural course; this requirement is separate from and in addition to the global and multicultural Liberal Studies requirement.

Minor

English Minor

To minor in English, 18 credits in English courses are required beyond the Liberal Studies requirement of ENGL 101 and ENGL 202. At least 6 of these credits must be numbered 300 level or higher. ENGL 121 may be used to fulfill part of the 18 credits required. Of these 18 credits, no more than 6 credits may be transferred to IUP from another university.

Certificate and Certification Programs

English as a Second Language Certificate

Prepares students to teach English as a second or other language through a focus on structures and uses of English, the role of sociocultural contexts in language learning, second language acquisition theory, and practices and materials for use in the ESL classroom. Completing the 12-credit program will enable students from multiple majors to pursue teaching English in a variety of domestic and international contexts. Teacher candidates seeking ESL state certification take an additional three credit field experience course during which they are placed in a P-12 ESL classroom.

Required Courses:

- ENGL 415 - English Language Studies for Teachers **Credits: 3**
- ENGL 424 - Second Language Acquisition **Credits: 3**
- ENGL 426 - ESL Methods and Materials **Credits: 3**
- ENGL 442 - Cross-Cultural Communication **Credits: 3**

The above courses may be offered as DE courses or face to face.

For Teacher Candidates:

If students are majoring in an education program that leads to certification, they must add ENGL 493 in order to apply for ESL certification from the state of Pennsylvania. ENGL 493 is only offered as a face to face course.

- ENGL 493 - Internship **Credits: 3-12 (3 credits needed)**
(1)

Total Certificate Requirements: 12-15

(1) The field experience, ENGL 493, requires 60 hours of direct work with English Language Learners (ELLs), a minimum of 30 hours of which must be in an approved public-school classroom setting. Students sign up for ENGL 493 in fall. A minimum of 30 hours in the classroom must be completed in the fall. The remaining 30 hours (if the full 60 are not completed in the classroom in fall) may be continued into spring. The remaining 30 hours could be completed in a variety of approved settings, including after-school clubs that provide ESL tutoring and other community locations that offer services to ELLs.

Other Degrees

English Honors Program

The honors program is open by departmental permission to declared English majors with a minimum 3.25 cumulative GPA and a 3.5 GPA in English courses.

To apply, students must submit a letter of application and a list of English courses taken (with instructors' names) to the chairperson of the Honors Track program. To be accepted, students must receive favorable evaluations from a majority of professors of courses taken and approval by the Honors Track program committee.

Students must complete one upper-level (300-400) H-designated course (3 credits) or ENGL 483/H Honors Thesis in English and ENGL 484 - Topics in English Studies. In conjunction with ENGL 484, students must take ENGL 485 - Honors English Portfolio/H .

Prerequisites:

Declared major in English, completion of ENGL 101, ENGL 122, and ENGL 202; 15cr in the major, including at least two survey courses; and permission of English Honors Track program committee

Required Courses:

Additional Requirements:

6cr in any combination of the following options:

ENGL 483 - Honors Thesis **Credits:** 1-6 (Honors)

Any H-designated English course **Credits:** 0-6

Total Honors Requirements: 7

Foreign Languages

Website: www.iup.edu/foreignlanguages

Dr. Charles McCreary, Chair

The Department of Foreign Languages offers a varied curriculum designed to provide not only basic language instruction but also the more advanced competencies needed by language specialists and students hoping to take advantage of an international study experience.

Bachelor of Arts

Spanish, BA

The department offers a varied curriculum to provide not only basic language instruction in Spanish, but also the more advanced competencies needed by language specialists and students hoping to take advantage of an international study experience. For the undergraduate Spanish major, the department has two degree programs: the BSEd and the BA program with a major in Spanish.

Students majoring in Spanish will acquire proficiency in all phases of the language and enter more deeply into the history, culture, and literature of Spanish-speaking countries. Spanish majors generally find employment in government work, librarianship, journalism and public relations, foreign trade, airlines, tourism, business, criminology, and teaching. Students choosing careers as secondary school teachers will find the close supervision and advanced methodology offered by the department a distinct asset.

Placement

Students with previous Spanish study in high school will be placed into the appropriate course levels by means of a written departmental exam, administered before the beginning of the semester. In addition, students judged to be native or heritage speakers (either through the written placement exam or by classroom instructors), will have their speaking proficiency assessed by an oral proficiency tester in the Department of Foreign Languages who is currently certified by the American Council on the Teaching of Foreign Languages (ACTFL). Students who receive an advisory oral proficiency rating of Advanced Low level on the oral proficiency scale developed by ACTFL will not be permitted to enroll in SPAN 101, SPAN 102, SPAN 201, or SPAN 220. Students who receive an advisory oral proficiency rating of Advanced-Mid level or higher will not be permitted to enroll in SPAN 101, SPAN 102, SPAN 201, SPAN 220, SPAN 350, or SPAN 450. Students who are rated in the advanced range are encouraged to seek course credit for their oral proficiency levels by applying through the American Council on Education (ACE) Credit Recommendation Service in conjunction with Language Testing International (LTI) (see next section). In the case of Spanish majors and minors who place out of the courses listed as a result of having the advanced-level oral proficiency and choose NOT to pursue ACE credits, SPAN 201 will be waived (no credits granted), and students will need to seek other Spanish classes in place of the required SPAN 220 and SPAN 350 courses.

No student will be permitted to register for or take a D/F repeat in SPAN 101, SPAN 102, or SPAN 201 when credit has already been received for a higher-numbered course. No student will be permitted to register for or take a D/F repeat in SPAN 220 when credit has already been received for SPAN 350 and/or SPAN 450.

Course Credit for Oral Proficiency Levels

Incoming students may receive course credit for their oral proficiency levels in Spanish through the American Council on Education (ACE) Credit Recommendation Service and Language Testing International (LTI), the assessment agency for the American Council on the Teaching of Foreign Languages (ACTFL). Students who have taken an ACTFL Oral Proficiency Interview (OPI) through LTI, received a proficiency rating by LTI, and received credit recommendation by ACE may receive the following course credits in Spanish at IUP:

ACTFL Oral Proficiency Ratings (rated by LTI)	ACE Credit Recommendations	IUP Spanish Course Equivalencies
Intermediate-Mid	4 Lower Division credits	Either SPAN 102 or SPAN 201, depending on placement on departmental written exam
Intermediate-High/Advanced Low	8 Lower Division credits	SPAN 201 and SPAN 220
Advanced-Mid	10 Lower Division credits	SPAN 201 and SPAN 220 and SPAN 350
Advanced-High/Superior	10 Lower Division credits and 3 Upper Division credits	SPAN 201 and SPAN 220 and SPAN 350 and SPAN 450

To begin the process, students must contact LTI by e-mail (testing@languagetesting.com) to request an ACE College Credit Recommendation by OPI Examination information package and application. There is a fee for the OPI and an ACE application fee.

Study Abroad

Study Abroad: The university has established study-abroad centers in Spain, Mexico, France, and Costa Rica. The program in Valladolid, Spain, is a second-semester-only program, whereas the ones in Mexico and Costa Rica are summer programs. All majors are required to participate in study abroad; nonmajors are also accepted into these programs. The 18 credits in Spain, 7 credits in Mexico, 6 credits in France, or 4 credits in Costa Rica are applicable, all or in part, to a major, minor, or certificate in Spanish and French (as applicable). Students interested in more information should contact the department.

Liberal Studies: 46-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

Liberal Studies Electives: 6

No courses with SPAN prefix

College:

Foreign Language (included in major)

Major: 33-37

Required Courses:

- SPAN 201 - Intermediate Spanish **Credits: 4 (2)**
- SPAN 220 - Intermediate Spanish Conversation **Credits: 3**
- SPAN 230 - Intermediate Spanish Composition and Grammar **Credits: 3**
- SPAN 260 - Introduction to Hispanic Literature **Credits: 3**
- SPAN 330 - Advanced Spanish Composition and Grammar **Credits: 3**
- SPAN 340 - Hispanic Cultures into the 19th Century **Credits: 3**
- SPAN 342 - Spanish Cultures from the 19th Century to the Present **Credits: 3**
- or
- SPAN 344 - Spanish-American Cultures from the 19th Century to the Present **Credits: 3**
- SPAN 350 - Advanced Spanish Conversation **Credits: 3**
- SPAN 362 - Survey of Peninsular Literature **Credits: 3**
- or
- SPAN 364 - Survey of Spanish-American Literature **Credits: 3**

Controlled Electives:

- Any two courses from those numbered 400-431 **Credits: 6**
- Any 3cr in SPAN courses 342 or above except SPAN 390 **Credits: 3**

Free Electives: 36-41

Total Degree Requirements: 120

(1) Students must successfully complete a program of language study in a Spanish-speaking country. This program must, as a minimum, last four weeks and carry 3 or more credits extending beyond the intermediate level. Students may fulfill this requirement by participating in any of the programs primarily administrated by faculty of IUP's Department of Foreign Languages. Students wishing to fulfill this requirement through any other study abroad program must obtain prior approval from the department. Requests for exemptions to this requirement must be initiated by the student in writing and submitted to the department chair.

(2) Students for whom SPAN 201 is waived (by means of placement tests) only need 33 credits in Spanish courses

Bachelor of Science in Education

Spanish Education K-12, BSED

The following additional requirements for Spanish Education K-12 in the Admission to Teacher Education and Certification Process are required. Please see the remainder of the requirements for all BSEd majors in the "3-Step Process for Teacher Education" in the College of Education and Communications section of this catalog. Students should refer to the Department of Foreign Languages/Spanish website and the *Spanish Education K-12 Student Handbook* for departmental guidelines and detailed explanations of program requirements, including the procedure for taking the OPI and WPT.

Mid-Program Review

During the semester in which students complete EDUC 242 with a "C" or better, they must meet the following departmental requirements:

- Complete a departmental/advisory writing proficiency test in Spanish. Students will receive written feedback on their writing performance including areas for improvement that may be necessary to reach the exit requirement of Advanced-Low in writing.

Demonstrate Intermediate-Mid or higher level of oral proficiency in Spanish in a departmental/advisory individual Oral Proficiency Interview (ACTFL).

Satisfactorily complete an interview in English with the Spanish education coordinator, a second faculty member from the Spanish section of the Department of Foreign Languages, and one cooperating teacher in order to assess their ability to interact with others on a professional level.

Have a minimum GPA in Spanish course work of 3.0.

Admission to Student Teaching

Demonstrate Advanced-Low or higher level of oral proficiency in Spanish in an individual Oral Proficiency Interview (ACTFL)—to be completed instead of the PRAXIS II Spanish: Content Knowledge Exam.

Demonstrate Advanced-Low or higher level of written proficiency in Spanish in an individual Writing Proficiency Test (ACTFL)—to be completed instead of the PRAXIS II Spanish: Content Knowledge Exam.

Have a minimum GPA in Spanish course work of 3.0.

Earn a grade of "C" or better in SPAN 330 and SPAN 453.

See requirements leading to teacher certification, titled "3- Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 46-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

MATH 101 - Foundations of Mathematics **Credits:** 3 or higher

Social Science:

ANTH 110 - Contemporary Anthropology **Credits:** 3

PSYC 101 - General Psychology **Credits:** 3

Liberal Studies Electives: 6

MATH course (1)

No courses with SPAN prefix

College: 31

Preprofessional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits:** 3

EDSP 102 - Educational Psychology **Credits:** 3

Professional Education Sequence:

EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits:** 2

EDEX 323 - Instruction of English Language Learners with Special Needs **Credits:** 2

EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits:** 3

EDUC 242 - Pre-student Teaching Clinical Experience I **Credits:** var-1

EDUC 342 - Pre-student Teaching Clinical Experience II **Credits:** 1

EDUC 441 - Student Teaching **Credits:** 5-12

EDUC 442 - School Law **Credits:** 1

EDUC 453 - Teaching of Foreign Languages in the Secondary School **Credits:** 3

Major: 36-40

Study Abroad (2)

Required Courses:

SPAN 201 - Intermediate Spanish **Credits:** 4 (3)

SPAN 220 - Intermediate Spanish Conversation **Credits:** 3

SPAN 230 - Intermediate Spanish Composition and Grammar **Credits:** 3

SPAN 260 - Introduction to Hispanic Literature **Credits:** 3

SPAN 330 - Advanced Spanish Composition and Grammar **Credits:** 3

SPAN 340 - Hispanic Cultures into the 19th Century **Credits:** 3

SPAN 342 - Spanish Cultures from the 19th Century to the Present **Credits:** 3

or

SPAN 344 - Spanish-American Cultures from the 19th Century to the Present **Credits:** 3

SPAN 350 - Advanced Spanish Conversation **Credits:** 3

SPAN 390 - Teaching of Elementary Content through the Spanish Language **Credits:** 3

SPAN 450 - Conversation Forum **Credits:** 3

SPAN 453 - Spanish Phonetics and Phonemics **Credits:** 3

Controlled Electives:

Any other 3cr from SPAN 300 or above

SPAN 362 - Survey of Peninsular Literature **Credits:** 3

or

SPAN 364 - Survey of Spanish-American Literature **Credits:** 3

or

A 400-level literature course

Free Electives: 1-7

Total Degree Requirements: 120

(1) Students who do not wish to select a MATH course under the Liberal Studies electives must still take a second MATH course (MATH 101 or higher) to fulfill the state requirements.

(2) Students must successfully complete a program of language study in a Spanish-speaking country. This program must, as a minimum, last four weeks and carry 3 or more credits extending beyond the intermediate level. Students may fulfill this requirement by participating in any of the programs primarily administered by faculty of IUP's Department of Foreign Languages. Students wishing to fulfill this requirement through any other study abroad program must obtain prior approval from the department. Requests for exemptions to this requirement must be initiated by the student in writing and submitted to the department chair.

(3) Students for whom SPAN 201 is waived (by means of placement tests) only need 36 credits in Spanish courses.

Minor

French Minor

Placement

Students with no previous French study will be placed in FRNC 101, a class reserved for true beginners. Students with previous French study in high school or college will be placed into the appropriate course by means of the online WebCAPE placement test. This test may be taken more than once before enrolling in French courses; it is free of charge for IUP students. Instructions on how to take the online WebCAPE test are available on the departmental website and in print in the Department of Foreign Languages office (Sutton Hall). As deemed necessary by the individual student or French faculty, the proposed WebCAPE placement may be further refined: Students' writing and speaking proficiency may be additionally assessed by one or more faculty members in the French program in the Department of Foreign Languages. Each student's individual requirements and the judgment of the classroom instructors will also be considered in placement. No student will be allowed to register for or take a D/F repeat in FRNC 101, FRNC 102, or FRNC 201 when credit has already been received for a higher numbered course.

IUP Course Credit for Acquired Proficiency

Incoming students may receive course credit for their oral proficiency levels in French through the American Council on Education (ACE) Credit Recommendation Service and Language Testing International (LTI), the assessment agency for the American Council on the Teaching of Foreign Languages (ACTFL). Students who have taken an ACTFL Oral Proficiency Interview (OPI) through LTI, received a proficiency rating by LTI, and received credit recommendation by ACE may receive the following course credits in French at IUP:

ACTFL Oral Proficiency Ratings (rated by LTI)	ACE Credit Recommendations	IUP French Course Equivalencies
Intermediate-Mid	4 Lower Division credits	Either FRNC 102 or FRNC 201 depending on placement on departmental written exam
Intermediate-High/Advanced Low	8 Lower Division credits	FRNC 201 and FRNC 220
Advanced-Mid or higher	10 Lower Division credits	FRNC 201, FRNC 220 and approved conversation elective

To begin the process, students must contact LTI by e-mail (testing@language-testing.com) to request an ACE College Credit Recommendation by OPI Examination information package and application. There is a fee for the OPI and an ACE application fee to be paid by the candidate.

Study Abroad French Studies Summer Programs: Aix-en-Provence, France/Intensive French Language (Aix-Marseille University) and the Cours d'été, Nancy, France

The Department of Foreign Languages has partnered with the Office of International Education to establish two study abroad experiences in Aix-en-Provence and in Nancy, France. All students having successfully completed FRNC 102 are invited to consider continuing their study of French in France. Students seeking the certificate or minor in French are strongly encouraged to study abroad in one of our centers in France.

These summer programs propose a five or six-week session, including up to 25 hours of weekly language instruction as well as cultural field trips or activities, and weekly debriefing sessions with faculty from the IUP Department of Foreign Languages. Housing options include accommodations in university housing, apartments, and homestay with a host family. Both programs offer 6 hours of transfer credits that may be used toward completion of any foreign language requirement, the certificate in French, or the French minor.

For further information about cost and application procedures, contact the Department of Foreign Languages.

Required Courses:

(1)

FRNC 201 - Intermediate French **Credits: 4 (2)**

FRNC 220 - Intermediate French Conversation **Credits: 3**

FRNC 230 - Intermediate French Composition and Grammar **Credits: 3**

One IUP French elective course **Credits: 3**

Two or three courses at IUP or an accredited institution in the US or abroad; transfer or ACE credit; individualized instruction or independent study courses (3, 4) **Credits: 6-9**

Total Minor Requirements: 18-19

(1) At least nine of the 18 or 10 of the 19 credits must be taken at IUP. No more than 9cr transfer or study abroad credits will be counted toward the French minor; any additional transfer or study abroad credits will count as free electives.

(2) If a student is exempted from FRNC 201 based on his/her score on the French placement test, the student must instead take a 200-or 300- level course in place of FRNC 201.

(3) At least 6cr of the minor must be upper-division courses, generally those numbered 300 and above or otherwise designated as upper-division.

(4) All courses taken outside of IUP must be approved by the French minor advisor. Various study abroad opportunities in France and French-speaking countries are available to students through departmental programs and offerings provided by the Office of International Education (OIE).

German Minor

Study Abroad

The department encourages all students who study German at IUP to consider study abroad for one or two semesters. To provide this opportunity at a relatively modest cost, the university has arranged an exchange of students between Duisburg University and IUP. By participating in this or other approved programs, students can earn from 12 to 14 credits per semester. For information, contact the Department of Foreign Languages.

IUP Course Credit for Acquired Proficiency

Incoming students may receive course credit for their oral proficiency levels in German through the American Council on Education (ACE) Credit Recommendation Service and Language Testing International (LTI), the assessment agency for the American Council on the Teaching of Foreign Languages (ACTFL). Students who have taken an ACTFL Oral Proficiency Interview (OPI) through LTI, received a proficiency rating by LTI, and received credit recommendation by ACE may receive the following course credits in German at IUP:

ACTFL Oral Proficiency Ratings (LTI)	ACE Credit Recommendations	IUP German Course Equivalencies
Intermediate-Mid	4 Lower Division credits	Either GRMN 102 or GRMN 201 depending on placement on departmental written exam
Intermediate-High/Advanced Low	8 Lower Division credits	GRMN 201 and GRMN 220
Advanced-Mid or higher	10 Lower Division credits	GRMN 201, GRMN 220 and approved conversation elective

To begin the process, students must contact the Foreign Languages Department.

Required Courses:

(1)

GRMN 201 - Intermediate German **Credits: 4**

(2)

GRMN 220 - Intermediate German Conversation **Credits: 3**

GRMN 230 - Intermediate German Composition and Grammar **Credits: 3**

One IUP German elective course **Credits: 3**

Two or three courses at IUP or an accredited institution in the US or abroad; transfer credit; individualized instruction or independent study courses (3, 4) **Credits: 6-9**

Total Minor Requirements: 18-19

(1) At least nine of the 18 or 10 of the 19 credits must be taken at IUP. No more than 9cr transfer or study abroad credits will be counted toward the German minor; any additional transfer or study abroad credits will count as free electives.

(2) If a student is exempted from GRMN 201 based on his/her score on the German placement test, the student must instead take a 200- or 300- level course in place of GRMN 201.

(3) At least 6cr of the minor must be upper-division courses, generally those numbered 300 and above or otherwise designated as upper-division.

(4) All courses taken outside of IUP must be approved by the German minor advisor. Various study abroad opportunities in Germany are available to students through departmental programs and offerings provided by the Office of International Education (OIE).

Spanish Minor

Required Courses:

SPAN 220 - Intermediate Spanish Conversation **Credits: 3**

SPAN 230 - Intermediate Spanish Composition and Grammar **Credits: 3**

SPAN 260 - Introduction to Hispanic Literature **Credits: 3**

SPAN 330 - Advanced Spanish Composition and Grammar **Credits: 3**

Two additional courses at the SPAN 3XX or 4XX level (except SPAN 390) **Credits: 6**

Total Minor Requirements: 18

Certificate and Certification Programs

Foreign Language/Chinese Certificate

The Foreign Language Certificate is an 18-credit program aimed at those who want to add a foreign language credential to their main academic preparation, either as a bachelor's degree in progress or in a postbaccalaureate setting. The certificate is an excellent opportunity for students in any college of the university, particularly those in colleges where foreign language study is not generally required, such as the Eberly College of Business and Information Technology and the College of Health and Human Services.

This certificate offers students a variety of options for fulfilling the requirements. In addition to completing the course sequence, students may earn credits toward the certificate by taking an Advanced Placement Exam, or they may earn ACE credits. Students with previous foreign language experience who do not earn credits through Advanced Placement or ACE are required to take a departmentally-approved language placement exam for possible exemption from some courses. Students are allowed to exempt out of up to 12 credits of the initial language sequence either by exam or through transfer credits from another institution. All students, including returning, graduate, and transfer students, are required to take at least six credits at IUP from Foreign Language levels 220 and above.

Initial Language Sequence 12cr

CHIN 101 - Elementary Chinese I **Credits: 4**

CHIN 102 - Elementary Chinese II **Credits: 4**

CHIN 201 - Intermediate Chinese **Credits: 4**

Intermediate Language Sequence: 6

Students must complete 6 credits above the 201 level in course work related to Chinese language or culture. The 6 additional credits must be approved by the Department of Foreign Languages chair or the chair's designee.

Courses taken in a study abroad context may also count toward the certificate. Transfer credit received through study abroad experiences must be approved by chair of the Department of Foreign Languages or the chair's designee or previously approved through the Admissions–Transfer Services Office.

Oral Proficiency Interview Exam

By the midterm of the final semester of course work for the certificate, students will be required to complete the Oral Proficiency Interview (OPI) or the Oral Proficiency Interview by Computer (OPIc), administered by Language Testing International (LTI). The OPI and OPIc provide an independent rating of the student's oral skills in the language, which may be useful for employment purposes. There is a fee for the OPI and the OPIc, for which students will be responsible.

Total Certificate Requirements: 18

Foreign Language/French Certificate

The Foreign Language Certificate is an 18-credit program aimed at those who want to add a foreign language credential to their main academic preparation, either as a bachelor's degree in progress or in a postbaccalaureate setting. The certificate is an excellent opportunity for students in any college of the university, particularly those in colleges where foreign language study is not generally required, such as the Eberly College of Business and Information Technology and the College of Health and Human Services.

This certificate offers students a variety of options for fulfilling the requirements. In addition to completing the course sequence, students may earn credits toward the certificate by taking an Advanced Placement Exam, or they may earn ACE credits. Students with previous foreign language experience who do not earn credits through Advanced Placement or ACE are required to take a departmentally-approved language placement exam for possible exemption from some courses. Students are allowed to exempt out of up to 12 credits of the initial language sequence either by exam or through transfer credits from another institution. All students, including returning, graduate, and transfer students, are required to take at least six credits at IUP from Foreign Language levels 220 and above.

Initial Language Sequence 12cr

FRNC 101 - Basic French I **Credits: 4**

FRNC 102 - Basic French II **Credits: 4**

FRNC 201 - Intermediate French **Credits: 4**

Intermediate Language Sequence: 6

Students must complete FRNC 220 and 3 additional credits above the 201 level. The 3 additional credits may be either FRNC 230 or another course related to French, which must be approved by the Department of Foreign Languages chair or the chair's designee.

Courses taken in a study abroad context may also count toward the certificate. Transfer credit received through study abroad experiences must be approved by chair of the Department of Foreign Languages or the chair's designee or previously approved through the Admissions–Transfer Services Office.

Oral Proficiency Interview Exam

By the midterm of the final semester of course work for the certificate, students will be required to complete the Oral Proficiency Interview (OPI) or the Oral Proficiency Interview by Computer (OPIc), administered by Language Testing International (LTI). The OPI and OPIc provide an independent rating of the student's oral skills in the language, which may be useful for employment purposes. There is a fee for the OPI and the OPIc, for which students will be responsible.

Total Certificate Requirements: 18

Foreign Language/German Certificate

The Foreign Language Certificate is an 18-credit program aimed at those who want to add a foreign language credential to their main academic preparation, either as a bachelor's degree in progress or in a postbaccalaureate setting. The certificate is an excellent opportunity for students in any college of the university, particularly those in colleges where foreign language study is not generally required, such as the Eberly College of Business and Information Technology and the College of Health and Human Services.

This certificate offers students a variety of options for fulfilling the requirements. In addition to completing the course sequence, students may earn credits toward the certificate by taking an Advanced Placement Exam, or they may earn ACE credits. Students with previous foreign language experience who do not earn credits through Advanced Placement or ACE are required to take a departmentally-approved language placement exam for possible exemption from some courses. Students are allowed to exempt out of up to 12 credits of the initial language sequence either by exam or through transfer credits from another institution. All students, including returning, graduate, and transfer students, are required to take at least six credits at IUP from Foreign Language levels 220 and above.

Initial Language Sequence 12cr

GRMN 101 - Elementary German I **Credits: 4**

GRMN 102 - Elementary German II **Credits: 4**

GRMN 201 - Intermediate German **Credits: 4**

Intermediate Language Sequence: 6

Students must complete GRMN 220 and 3 additional credits above the 201 level. The 3 additional credits may be either GRMN 230 or another course related to German, which must be approved by the Department of Foreign Languages chair or the chair's designee.

Courses taken in a study abroad context may also count toward the certificate. Transfer credit received through study abroad experiences must be approved by chair of the Department of Foreign Languages or the chair's designee or previously approved through the Admissions–Transfer Services Office.

Oral Proficiency Interview Exam

By the midterm of the final semester of course work for the certificate, students will be required to complete the Oral Proficiency Interview (OPI) or the Oral Proficiency Interview by Computer (OPIc), administered by Language Testing International (LTI). The OPI and OPIc provide an independent rating of the student's oral skills in the language, which may be useful for employment purposes. There is a fee for the OPI and the OPIc, for which students will be responsible.

Total Certificate Requirements: 18

Foreign Language/Japanese Certificate

The Foreign Language Certificate is an 18-credit program aimed at those who want to add a foreign language credential to their main academic preparation, either as a bachelor's degree in progress or in a postbaccalaureate setting. The certificate is an excellent opportunity for students in any college of the university, particularly those in colleges where foreign language study is not generally required, such as the Eberly College of Business and Information Technology and the College of Health and Human Services.

This certificate offers students a variety of options for fulfilling the requirements. In addition to completing the course sequence, students may earn credits toward the certificate by taking an Advanced Placement Exam, or they may earn ACE credits. Students with previous foreign language experience who do not earn credits through Advanced Placement or ACE are required to take a departmentally-approved language placement exam for possible exemption from some courses. Students are allowed to exempt out of up to 12 credits of the initial language sequence either by exam or

through transfer credits from another institution. All students, including returning, graduate, and transfer students, are required to take at least six credits at IUP from Foreign Language levels 220 and above.

Initial Language Sequence 12cr

JAPN 101 - Elementary Japanese I **Credits:** 4

JAPN 102 - Elementary Japanese II **Credits:** 4

JAPN 201 - Intermediate Japanese **Credits:** 4

Intermediate Language Sequence: 6

Students must complete 6 credits above the 201 level in course work related to Japanese language or culture. The 6 additional credits must be approved by the Department of Foreign Languages chair or the chair's designee.

Courses taken in a study abroad context may also count toward the certificate. Transfer credit received through study abroad experiences must be approved by chair of the Department of Foreign Languages or the chair's designee or previously approved through the Admissions–Transfer Services Office.

Oral Proficiency Interview Exam

By the midterm of the final semester of course work for the certificate, students will be required to complete the Oral Proficiency Interview (OPI) or the Oral Proficiency Interview by Computer (OPIc), administered by Language Testing International (LTI). The OPI and OPIc provide an independent rating of the student's oral skills in the language, which may be useful for employment purposes. There is a fee for the OPI and the OPIc, for which students will be responsible.

Total Certificate Requirements: 18

Foreign Language/Spanish Certificate

The Foreign Language Certificate is an 18-credit program aimed at those who want to add a foreign language credential to their main academic preparation, either as a bachelor's degree in progress or in a postbaccalaureate setting. The certificate is an excellent opportunity for students in any college of the university, particularly those in colleges where foreign language study is not generally required, such as the Eberly College of Business and Information Technology and the College of Health and Human Services.

This certificate offers students a variety of options for fulfilling the requirements. In addition to completing the course sequence, students may earn credits toward the certificate by taking an Advanced Placement Exam, or they may earn ACE credits. Students with previous foreign language experience who do not earn credits through Advanced Placement or ACE are required to take a departmentally-approved language placement exam for possible exemption from some courses. Students are allowed to exempt out of up to 12 credits of the initial language sequence either by exam or through transfer credits from another institution. All students, including returning, graduate, and transfer students, are required to take at least six credits at IUP from Foreign Language levels 220 and above.

Initial Language Sequence 12cr

SPAN 101 - Elementary Spanish I **Credits:** 4

SPAN 102 - Elementary Spanish II **Credits:** 4

SPAN 201 - Intermediate Spanish **Credits:** 4

Intermediate Language Sequence: 6

Students must complete SPAN 220 and 3 additional credits above the 201 level. The 3 additional credits may be either SPAN 230 or another course related to Spanish, which must be approved by the Department of Foreign Languages chair or the chair's designee.

Courses taken in a study abroad context may also count toward the certificate. Transfer credit received through study abroad experiences must be approved by chair of the Department of Foreign Languages or the chair's designee or previously approved through the Admissions–Transfer Services Office.

Oral Proficiency Interview Exam

By the midterm of the final semester of course work for the certificate, students will be required to complete the Oral Proficiency Interview (OPI) or the Oral Proficiency Interview by Computer (OPIc), administered by Language Testing International (LTI). The OPI and OPIc provide an independent rating of the student's oral skills in the language, which may be useful for employment purposes. There is a fee for the OPI and the OPIc, for which students will be responsible.

Total Certificate Requirements: 18

Other Degrees

Spanish Honors Program

The honors program is open by departmental permission to Spanish and Spanish education K-12 majors with a minimum 3.25 cumulative GPA and a 3.25 GPA in Spanish courses.

To apply, students must submit two letters of reference from department faculty members and a two-page self-statement describing the student's academic and career goals.

Students complete two semesters of SPAN 483 /H/, CHSS 489 (a multidisciplinary colloquium emphasizing problem solving, discussion, reading, and writing on a topic or theme), and one course from SPAN 410-SPAN 431 . Students must earn at least a grade of "B" in each course completed for the track. To determine how Honors Track courses will be integrated into existing requirements for the Spanish or Spanish education K-12 major, students should consult their advisors.

Required Courses:

Total Honors Requirements: 12

Geography and Regional Planning

Website: www.iup.edu/georegionalplan

John E. Benhart Jr., Chair

The Department of Geography and Regional Planning offers three separate degree programs for the geographer, planner, and teacher: bachelor of arts degree with a major in geography, bachelor of science degree with a major in regional planning, and bachelor of science in education degree with a major in social studies education—geography track.

Specific core requirements in Geography and Regional Planning offer a structured approach for majors. Appropriate tracks are available in both programs to prepare students for graduate work and to support different career options for majors. There are three tracks for the geography major (Environment/Energy, Geospatial Information Science and Technology, Human Geography,) and two for the regional planning major (Environmental Planning, Community Planning and Development).

Department resources, which include the James Payne/Ruth Shirey Geographic Information Science Laboratory, the Robert Begg/Charles Weber Planning Design Laboratory/Studio, and the Dey Whit Watts Planning Studio offer access to spatial analysis and planning design equipment and applications. These well-equipped laboratories and studios house and leverage 50 workstations, large-format plotters, global positioning systems (GPS) units and a base station, small unmanned aerial systems (sUAS) aircraft, a weather station, and hydrologic and atmospheric monitoring devices. Geographic Information Systems (GIS), image processing, geovisualization, planning design, and computer-aided drafting (CAD) software includes the ArcGIS suite, the Adobe Creative Suite, AutoCAD, DroneDeploy UAS, ERDAS Imagine, Google SketchUp, MapInfo, and Trimble GPS PathFinder Office and TerraSync.

A strong internship program directed by department faculty offers numerous public, private, and nonprofit placements in industry, engineering, conservation, land management, and planning agencies at the local, state, and federal levels. Because of employment demand for students from department programs, approximately 80 percent of internship placements are paid positions.

Bachelor of Arts

Geography and Geographic Information Science (GIS), BA

The Department of Geography and Regional Planning offers two separate degree programs for the geographer and planner: bachelor of arts degree with a major in geography and geographic information science (GIS) and bachelor of science degree with a major in regional planning. Specific core requirements in Geography and Regional Planning offer a structured approach for majors. Appropriate specializations are available in both programs to prepare students for graduate work and to support different career options for majors. There are three specializations for the geography and GIS major (Environment/ Energy, Geospatial Information Science and Technology, Human Geography,) and two for the regional planning major (Environmental Planning, Community Planning and Development).

Department resources, which include the James Payne/Ruth Shirey Geographic Information Science Laboratory, the Robert Begg/Charles Weber Planning Design Laboratory/Studio, and the Dey Whit Watts Planning Studio offer access to spatial analysis and planning design equipment and applications. These well-equipped laboratories and studios house and leverage 50 workstations, large-format plotters, global positioning systems (GPS) units and a base station, small unmanned aerial systems (sUAS) aircraft, a weather station, and hydrologic and atmospheric monitoring devices. Geographic Information Systems (GIS), image processing, geovisualization, planning design, and computer-aided drafting (CAD) software includes the ArcGIS suite, the Adobe Creative Suite, AutoCAD, DroneDeploy UAS, ERDAS Imagine, Google SketchUp, MapInfo, and Trimble GPS PathFinder Office and TerraSync.

A strong internship program directed by department faculty offers numerous public, private, and nonprofit placements in industry, engineering, conservation, land management, and planning agencies at the local, state, and federal levels. Because of employment demand for students from department programs, approximately 80 percent of internship placements are paid positions.

Geography and Geographic Information Science (GIS)

Geography has several traditions of study. Three of the most significant are the study of relationships between humans and environment (human-environment interaction), the study of places (their characteristics and structure), and the study of spatial organization (the way people use and organize space on earth, and the distribution of natural phenomena on the earth's surface). All three traditions focus on understanding distributions of human and natural phenomena at global, regional and local scales, by building knowledge regarding the phenomena under investigation (for examples, cities, watersheds, business/industry location, habitats, cultural patterns, transportation, land use, resource management, the built environment, and energy production and use) and applying relevant methods and technologies (including geographic information systems (GIS), small unmanned aerial systems (sUAS), remote sensing, global positioning systems (GPS) and geovisualization) to analyze them. The Geography program is organized into three specializations to allow students to build knowledge and skills to pursue their interests and gain employment: Environment/Energy, Geospatial Information Science & Technology, and Human Geography.

Geography-Environment/Energy Specialization

The Environment/Energy Specialization prepares students for careers in environmental fields, energy industries, or graduate study. Students who elect this specialization acquire knowledge of the physical and human processes that shape the environment, strategies/techniques for analyzing the environment, regulatory and compliance regimes for energy industries at the federal and state levels, mitigation strategies for environmental problems, and conceptual and technical aspects of geospatial techniques implemented in environmental and energy resource analyses and applications. The knowledge and skills acquired in this specialization prepare students to analyze, manage, and understand land resources, water resources, energy resources and habitats using industry-standard methods and technology. Students mastering the environmental knowledge and spatial techniques in this specialization will be well prepared to obtain employment as environmental analysts/scientists, energy industry spatial analysts/ environmental compliance specialists, environmental managers, or environmental engineering specialists.

Geography Geospatial Information Science and Technology Specialization

The Geospatial Information Science and Technology Specialization provides preparation for employment as geographic information systems (GIS) analysts and specialists, remote-sensing specialists, geospatial techniques specialists (including GPS and sUAS), cartographers, and geospatial intelligence analysts. Students are exposed to core geospatial information science concepts (GISc) that underlie emerging and fast-changing geospatial hardware, software, and infrastructure in our society such as geographic information systems (GIS), global-positioning systems (GPS), remote sensing, small unmanned aerial systems (sUAS or drones), and mobile spatial technologies, as well as opportunities to apply these concepts. The curriculum for this specialization is referenced to competencies identified in the U.S. Department of Labor Geospatial Competency Model, as well as the University Consortium for Geographic Information Science (UCGIS) Geographic Information Science and Technology Body of

Knowledge. Students completing the Geospatial Information Science and Technology Specialization will be well prepared to be employed in the rapidly-growing geospatial fields as GIS, remote sensing, and geointelligence professionals.

Geography Human Geography Specialization

The Human Geography Specialization provides a broad framework of ideas and theories regarding the spatial organization of human phenomena (for example cities, business/industry location, cultural patterns, transportation, economic patterns, land use, the built environment) in addition to coursework in industry standard location analysis techniques. The common thread through the course offerings in this specialization is the focus on understanding human-created geographic patterns on the earth's surface, and the methods which can be used to document and analyze these patterns. The knowledge base acquired in this specialization prepares students to understand and analyze urban development, business/industry location, cultural patterns, transportation accessibility, and economic development patterns. Students mastering the human geographic knowledge and analysis techniques in this specialization will be well prepared to obtain employment as location analysts, economic development professionals, demographic analysts, research analysts, or to gain admission to graduate programs.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 217 - Probability and Statistics **Credits:** 3 (1)

Natural Science:

GEOS 101 - The Dynamic Earth **Credits:** 3

GEOS 102 - The Dynamic Earth Lab **Credits:** 1

and

GEOS 103 - Oceans and Atmospheres **Credits:** 3

GEOS 104 - Oceans and Atmospheres Lab **Credits:** 1
recommended

Liberal Studies Electives: 6

No courses with GEOG prefix

College: 0-8

Foreign Language Intermediate Level (2)

Major: 42

Required Courses:

GEOG 213 - Cartography and Map Design **Credits:** 3

GEOG 230 - Cultural Geography **Credits:** 3

GEOG 231 - Economic Geography **Credits:** 3

GEOG 316 - Introduction to Geographic Information Systems **Credits:** 3

GEOG 341 - Climatology **Credits:** 3

GEOG 342 - Physiography **Credits:** 3

GEOG 411 - History of Geography **Credits:** 3

RGPL 350 - Introduction to Community Planning **Credits:** 3

Controlled Electives:

One course from GEOG 251-GEOG 257 **Credits:** 3

Select one of the following Specializations:

Environment/Energy Specialization:

Four courses from the following:

- GEOG 222 - Geography of National Parks **Credits:** 3
- GEOG 343 - Fresh Water Resources **Credits:** 3
- GEOG 345 - Biogeography for Environmental Managers **Credits:** 3
- GEOG 415 - Introduction to Remote Sensing **Credits:** 3
- GEOG 425 - Global Positioning Systems (GPS) Concepts and Techniques **Credits:** 3
- GEOG 435 - Geography of Energy **Credits:** 3
- GEOG 440 - Conservation: Environmental Analysis **Credits:** 3
- GEOG 444 - Energy Development and Compliance **Credits:** 3
- GEOG 455 - Advanced Remote Sensing **Credits:** 3
- RGPL 426 - Environmental Land Use Planning **Credits:** 3

Geospatial Information and Technology Specialization:

Four courses from the following:

- GEOG 415 - Introduction to Remote Sensing **Credits:** 3
- GEOG 421 - Enterprise GIS Management **Credits:** 3
- GEOG 424 - Technical Issues in Geographic Information Systems **Credits:** 3
- GEOG 425 - Global Positioning Systems (GPS) Concepts and Techniques **Credits:** 3
- GEOG 455 - Advanced Remote Sensing **Credits:** 3
- GEOG 460 - Foundations of Unmanned Aerial Systems Science and Applications **Credits:** 3
- GEOG 475 - Spatial Analysis Techniques **Credits:** 3

Human Geography Specialization:

Four courses from the following:

- GEOG 232 - Urban Landscapes **Credits:** 3
- GEOG 261 - Geography of Wine **Credits:** 3
- GEOG 331 - Population Geography **Credits:** 3
- GEOG 333 - Trade and Transportation **Credits:** 3
- GEOG 334 - Political Geography **Credits:** 3
- GEOG 336 - Social Geography **Credits:** 3
- GEOG 337 - Historical Geography **Credits:** 3
- GEOG 404 - Transportation Planning **Credits:** 3

Free Electives: 23-32

Strongly recommended for all majors:

- GEOG 493 - Internship **Credits:** 3-12

Recommended for Environment/Energy Specialization:

- BIOL 210 - Plant Biology **Credits:** 3

BIOL 362 - Ecology **Credits: 3**

GEOG 462 - Planning Policy, Implementation, and Administration **Credits: 3**

RGPL 462 - Planning Policy, Implementation, and Administration **Credits: 3**

GEOS 201 - Foundations of Geology **Credits: 4**

GEOS 202 - Quantitative Methods in the Geoscience **Credits: 2**

Recommended for Geospatial Information Technology Specialization:

RGPL 453 - Planning Design Studio I **Credits: 3**

RGPL 454 - Planning Design Studio II **Credits: 3**

Total Degree Requirements: 120

(1) An alternative to MATH 217 is 6cr of MATH courses. Only one must be a Liberal Studies MATH course.

(2) Intermediate-level foreign language may be included in Liberal Studies electives.

Bachelor of Science

Community Planning and Development Track, Regional Planning, BS

The mission of the Regional Planning program is to provide opportunities for students, planning professionals, citizens of a diverse regional community to master fundamental and innovative planning principles. The program trains students to become professional planners through a process that emphasizes conceptual knowledge, experiential learning, innovative planning skills, and civic engagement. Students work with colleagues and planners to guide change in a way that will make communities better places to live for present and future generations.

Employment opportunities for planners are excellent. This program has prepared students to work in planning agencies at the federal, state, regional, county, and local levels as well as in the private sector with planning consulting and engineering firms. As planners, they have been trained to work with the public to guide growth and change in metropolitan regions across the country. The two tracks—Environmental Planning and Community Planning and Development—are designed to focus on the knowledge, techniques and strengths of the faculty members, as well as provide students maximum opportunity to be competitive in the planning job market. As part of their course of study, students address and solve real-world problems through class projects and intern with practicing planners who deal with these issues in a professional environment. Planners work with communities to improve the quality of life for people who live there. They take a comprehensive view of issues, listen to all citizen perspectives, endeavor to reconcile controversy, and propose alternatives that can guide community decision making in allocating finite resources to create better places to live.

The Community Planning and Development Track prepares students for employment as professional planners adept at identifying and assessing community development challenges and applying advanced techniques to the development of livable communities. Data collection, spatial information management, and graphic presentation are integral skills taught in the program. Course work also equips students with a conceptual grounding on community development and housing markets theories, spatial data analysis in planning, and site location analysis. Course work includes methods for identifying, modeling, and analyzing the spatial organization of community systems from both practical and theoretical perspectives. Students in regional planning graduate with a working knowledge of land use regulations, and housing need assessment analysis techniques. They are familiar with strategies of economic development and housing markets. They understand both the theory and ethics of planning. Students completing this track should be able to assist diverse communities and organizations in identifying and finding solutions to a wide variety of community development challenges and how transportation planning impacts land use issues.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

MATH 217 - Probability and Statistics **Credits:** 3 recommended

Social Science:

RGPL 103 - Global Cities: Planning and Development **Credits:** 3 required

Liberal Studies Electives: 6

No courses with RGPL prefix

College: 0-8

Foreign Language Intermediate Level (1)

Major: 51

Required Courses in Planning:

RGPL 213 - Cartography and Map Design **Credits:** 3
RGPL 232 - Urban Landscapes **Credits:** 3
RGPL 316 - Introduction to Geographic Information Systems **Credits:** 3
RGPL 350 - Introduction to Community Planning **Credits:** 3
RGPL 352 - Planning Methods **Credits:** 3
RGPL 358 - Planning History and Theory **Credits:** 3
RGPL 412 - Community Planning Practicum **Credits:** 3
RGPL 453 - Planning Design Studio I **Credits:** 3
RGPL 454 - Planning Design Studio II **Credits:** 3
RGPL 458 - Land Use Law **Credits:** 3
RGPL 462 - Planning Policy, Implementation, and Administration **Credits:** 3
RGPL 468 - Planning Theory **Credits:** 3
RGPL 493 - Internship **Credits:** 1-12

Track Courses:

Two Required Courses:

RGPL 404 - Transportation Planning **Credits:** 3
RGPL 470 - Housing and Community Development Policy **Credits:** 3

Select Three Courses from the Following:

GEOG 334 - Political Geography **Credits:** 3
PLSC 354 - Metropolitan Problems **Credits:** 3
RGPL 415 - Introduction to Remote Sensing **Credits:** 3
RGPL 424 - Technical Issues in Geographic Information Systems **Credits:** 3
RGPL 426 - Environmental Land Use Planning **Credits:** 3

Free Electives: 14-23

Total Degree Requirements: 120

As they pass through the program, students will be expected to develop and maintain a portfolio of planning course work as a requirement for graduation.

(1) Intermediate-level foreign language may be included in Liberal Studies electives.

Minor

Geography Minor

A minor in geography is appropriate for majors in all other fields of the natural and social sciences. Students in marketing and information systems will find a minor in this field relevant. A minor consists of 18 credits in courses taken only with the GEOG prefix; at least two courses must be at the 200 level and at least two courses must be at the 300 level or above. The department suggests students take major core courses if graduate study is anticipated.

Controlled Electives:

(1)

At least two courses at the 200 level

At least two courses at the 300 level or above

Total Minor Requirements: 18

(1) Only courses taken as GEOG may be counted toward the minor.

Regional Planning Minor

A minor in regional planning is appropriate for majors in all other fields of the natural and social sciences. Students in marketing and information systems will find a minor in this field relevant. A minor consists of 18 credits in courses taken with the RGPL prefix. The department suggests students take the core in this program if graduate study is anticipated.

Controlled Electives:

Six RGPL courses **Credits:** 18 (1)

Total Minor Requirements: 18

(1) Only courses taken as RGPL may be counted toward the minor.

Certificate and Certification Programs

Geospatial Intelligence Certificate

This certificate prepares students to undertake the use and analysis of imagery, imagery intelligence, and geospatial information to describe, assess, and visually depict physical features and geographically-referenced activities on the Earth's surface for intelligence purposes. Students will learn the context, geographic information science, and geo intelligence tradecraft techniques to be well prepared to enter the workforce as an entry-level geospatial intelligence analyst for federal intelligence agencies or private intelligence contractors.

Required Courses: 21

GEOG 213 - Cartography and Map Design **Credits: 3**

or

RGPL 213 - Cartography and Map Design **Credits: 3**

GEOG 316 - Introduction to Geographic Information Systems **Credits: 3**

or

RGPL 316 - Introduction to Geographic Information Systems **Credits: 3**

GEOG 415 - Introduction to Remote Sensing **Credits: 3**

or

RGPL 415 - Introduction to Remote Sensing **Credits: 3**

GEOG 424 - Technical Issues in Geographic Information Systems **Credits: 3**

or

RGPL 424 - Technical Issues in Geographic Information Systems **Credits: 3**

GEOG 455 - Advanced Remote Sensing **Credits: 3**

or

RGPL 455 - Advanced Remote Sensing **Credits: 3**

GEOG 488 - Geospatial Intelligence Capstone **Credits: 3**

MLSC 201

or

PLSC 465 - Intelligence Process and Policy **Credits: 3**

Total Certificate Requirements: 21

Military Geographic Competencies Certificate

The goal of this certificate program is to provide students who are pursuing military science degree programs with geographic knowledge and geospatial expertise relevant to service in the armed forces. Among the proficiencies that students will develop are knowledge of global human and physical geography, global regional geographic characteristics, and cartographic and geospatial techniques.

Core Courses: 9

GEOG 104 - World Geography: Global Context **Credits: 3**

or

RGPL 103 - Global Cities: Planning and Development **Credits: 3**

GEOG 105 - Our Digital Earth: Mobile Devices, Web Applications, and Geospatial Technology **Credits: 3**

GEOG 213 - Cartography and Map Design **Credits: 3**

Controlled Electives: 6

One additional course from the following:

GEOG 254 - Geography of Russia, Central Eurasia, and Eastern Europe **Credits: 3**

GEOG 255 - Geography of Africa **Credits: 3**

GEOG 257 - Geography of South and Southwest Asia **Credits: 3**

One additional course from the following:

GEOG 316 - Introduction to Geographic Information Systems **Credits: 3**

GEOG 415 - Introduction to Remote Sensing **Credits:** 3

GEOG 425 - Global Positioning Systems (GPS) Concepts and Techniques **Credits:** 3

Total Certificate Requirements: 15

Shale, Gas, and Energy Certificate

Required Geoscience Courses: 6

GEOS 119 - Geology of Energy Resources **Credits:** 3 (1)

GEOS 409 - Geology of Shale Gas—Field Workshop **Credits:** 3

Required Geography Courses: 6

GEOG 109 - Geographic Information Science and Systems for Energy Applications **Credits:** 3 (1)

GEOG 409 - Spatial Analysis Applications in the Energy Sectors Workshop **Credits:** 3

Required Safety Science Courses: 6

SAFE 104 - Introduction to Safety in the Natural Gas Industry **Credits:** 3 (1)

SAFE 204 - Principles of Safety in the Natural Gas Industry **Credits:** 3

Total Certificate Requirements: 18

(1) With departmental permission, one 100-level introductory course may be substituted by an appropriate upper-division course.

Unmanned Aerial Systems (UAS) Science and Applications Certificate

This certificate provides students with foundational knowledge and technical skills in the emerging sector of small Unmanned Aerial Systems (UAS). Students will learn the regulatory environment for UASs in the United States, as well as the basics of UAS design and operation, aeronautics and flight theory, requirements for FAA Part 107 Remote Pilot certification, remote sensing and photogrammetric concepts, mission planning, UAS mission flight techniques, and processing techniques for data deliverables. The certificate is designed to provide students with knowledge, skills, experience and credentials to participate in the expanding UAS sector as a certified FAA Part 107 Remote Pilot, operator, or ancillary ground crew member/observer.

Required Courses:

GEOG 415 - Introduction to Remote Sensing **Credits:** 3

GEOG 316 - Introduction to Geographic Information Systems **Credits:** 3

or

GEOG 425 - Global Positioning Systems (GPS) Concepts and Techniques **Credits:** 3

GEOG 460 - Foundations of Unmanned Aerial Systems Science and Applications **Credits:** 3

GEOG 463 - Unmanned Aerial Systems for Remote Sensing and Spatial Data Acquisition **Credits:** 3

Total Certificate Requirements: 12

Other Degrees

Geography Honors Program

The honors program is open by departmental permission to majors with at least a 3.25 GPA in total university course work and a 3.25 GPA in geography courses. After completing 45 credits of university course work, all qualified majors will be invited to join the Geography Honors Track. Social Studies Education/Geography Track majors are encouraged to participate, with the realization that participation will require more than 120 credits.

Students must maintain a 3.0 GPA in the track. To determine how Honors Track courses will be integrated into existing requirements for the geography major, students should consult their academic advisor. To apply, students must submit a letter of intent to the Geography program director. The student's advisor and one other Geography faculty member must endorse the student's application.

Prerequisites:

Declared major in geography, completion of at least 45cr of university course work, 3.25 or higher GPA in major and overall, plus endorsement of advisor and one other Geography faculty member

Select one of the following options:

Option 1:

Two 600-level seminars

Two Courses from

GEOG 333 - Trade and Transportation **Credits: 3**
GEOG 334 - Political Geography **Credits: 3**
GEOG 337 - Historical Geography **Credits: 3**
GEOG 440 - Conservation: Environmental Analysis **Credits: 3 (1)**

Option 2:

One 600-level seminar
GEOG 483 (Honors) (2)

Two Courses from

GEOG 333 - Trade and Transportation **Credits: 3**
GEOG 334 - Political Geography **Credits: 3**
GEOG 337 - Historical Geography **Credits: 3**
GEOG 440 - Conservation: Environmental Analysis **Credits: 3 (1)**

Option 3:

GEOG 483 (Honors) (2)

Three Courses From

GEOG 333 - Trade and Transportation **Credits: 3**
GEOG 334 - Political Geography **Credits: 3**
GEOG 337 - Historical Geography **Credits: 3**
GEOG 440 - Conservation: Environmental Analysis **Credits: 3**

Option 4:

One 600-level seminar

Three Courses from

GEOG 333 - Trade and Transportation **Credits: 3**
GEOG 334 - Political Geography **Credits: 3**
GEOG 337 - Historical Geography **Credits: 3**
GEOG 440 - Conservation: Environmental Analysis **Credits: 3 (1)**

Total Honors Requirements: 12

(1) Students in these designated undergraduate courses will undertake an honors project identified in conjunction with the course instructor and reviewed by the Geography program director or the department chair (if the director is the course instructor).

(2) Credits for GEOG 483 are counted in the appropriate departmental concentration requirement.

Regional Planning Honors Program

The honors program is open by departmental permission to regional planning majors with at least a 3.25 GPA in total university course work and a 3.25 GPA in regional planning courses. After completing 45 credits of university course work, all qualified majors will be invited to join the Regional Planning Honors Track.

Students select one of the following options: (1) Two courses from RGPL 333, RGPL 345, RGPL 426, or RGPL 440 and two 600-level (graduate seminar) courses, (2) Two courses from RGPL 333, RGPL 345, RGPL 426, or RGPL 440 and one 600-level (graduate seminar) course and RGPL 483 Honors Thesis, (3) Three courses from RGPL 333, RGPL 345, RGPL 426, or RGPL 440 and RGPL 483 Honors Thesis, (4) Three courses from RGPL 333, RGPL 345, RGPL 426, or RGPL 440 and one 600-level (graduate seminar) course. Honors students who enroll in the above designated undergraduate courses will undertake an honors project identified in conjunction with the course instructor and reviewed by the Regional Planning program director or the department chair (if the director is the course instructor).

Prerequisites:

Declared major in regional planning, completion of at least 45cr of university course work, 3.25 or higher GPA in major and overall, plus endorsement of advisor and one other Regional Planning faculty member

Select One of the Following Options:

Option 1:

Two 600-level seminars

Two from

RGPL 333 - Trade and Transportation **Credits: 3**
RGPL 345 - Biogeography for Environmental Managers **Credits: 3**
RGPL 426 - Environmental Land Use Planning **Credits: 3**
RGPL 440 - Conservation: Environmental Analysis **Credits: 3 (1)**

Option 2:

One 600-level seminar
RGPL 483 (Honors) (2)

Two from

- RGPL 333 - Trade and Transportation **Credits: 3**
- RGPL 345 - Biogeography for Environmental Managers **Credits: 3**
- RGPL 426 - Environmental Land Use Planning **Credits: 3**
- RGPL 440 - Conservation: Environmental Analysis **Credits: 3 (1)**

Option 3:

- RGPL 483 (Honors) (2)

Three from

- RGPL 333 - Trade and Transportation **Credits: 3**
- RGPL 345 - Biogeography for Environmental Managers **Credits: 3**
- RGPL 426 - Environmental Land Use Planning **Credits: 3**
- RGPL 440 - Conservation: Environmental Analysis **Credits: 3 (1)**

Option 4:

- One 600-level seminar

Three from

- RGPL 333 - Trade and Transportation **Credits: 3**
- RGPL 345 - Biogeography for Environmental Managers **Credits: 3**
- RGPL 426 - Environmental Land Use Planning **Credits: 3**
- RGPL 440 - Conservation: Environmental Analysis **Credits: 3 (1)**

Total Honors Requirements: 12

- (1) Students in these designated undergraduate courses will undertake an honors project identified in conjunction with the course instructor and reviewed by the Regional Planning program director or the department chair (if the director is the course instructor).
- (2) Credits for RGPL 483 are counted in the appropriate departmental track requirement.

History

Website: www.iup.edu/history

R. Scott Moore, Chair

History is a critical study of the past that examines how societies have been shaped by cultural, political, social, and economic influences across time and space. Degree programs offered by the History Department are the bachelor of arts degree program in history, and the bachelor of science in education degree program in social studies education, concentrating in history. The Social Studies Education program prepares students to teach at the junior- and senior-high school levels. The Bachelor of Arts program includes a number of specializations that prepare students for careers in law, government service, public history, and broad business opportunities

History is the study of change in human societies over time, and thus it is of broad applicability. The many careers in teaching and in Public History (including work in museums, archives and the park service) attest to the continued importance of history to communities everywhere. Governments, non-government organizations and businesses all value the understanding of social change and the research skills the study of history is based on. All of us are living through the process of historical change and studying the discipline of history is the best way to understand these changes.

All students complete a set of skills and foundation courses where they develop the skills of research, analysis, and presentation that are essential to history and are introduced to the broad outlines of the history of the peoples of the United States and the world. During sophomore year B.A. students, in consultation with their advisor, choose a specialization based on their future career plans.

Public History Specialization

The BA in History Public History Specialization is designed for students interested in interpreting and creating history. Students can take courses in archival studies, digital history, museum studies, and oral history. Through these types of courses, public history students develop practical skills that will help them secure employment in libraries, museums, archives, national parks, heritage sites, media, and corporations. Furthermore, this specialization prepares students for graduate study in more specialized fields such as historic preservation, information sciences, library and archival science, material culture conservation, and museum curation.

Public Service Specialization

The BA in History Public Service Specialization prepares students for careers focused on helping others, from their local neighborhood to global communities. This broad field covers a range of occupations (Government, Nonprofits, and NGOs) all united by providing individuals an opportunity to make an impact. This specialization combines History's emphasis on critical thinking and communication skills (both oral and written) with skills from courses selected by the student and their advisor as an area of focused interest.

Private Sector Specialization

The BA in History Private Sector Specialization is designed to prepare students for job opportunities in today's global economy. History's focus on learning to recognize cause and effect, to distinguish change over time, to understand the value of context, and to appreciate the complexity of the human experience are essential skills in the marketplace. These skills transition well to a host of occupations in a variety of fields.

Pre-Law Specialization

The BA in History Pre-Law Specialization is aimed for students planning to pursue a legal career. History's emphasis on research, analyzing evidence, and using this evidence to produce a convincing argument is valuable preparation for a legal career.

Individualized Specialization

The BA in History Individualized Specialization is designed by the student in consultation with their advisor. It is particularly suited to those students pursuing a double major or planning to attend graduate school. All students in the Individualized specialization are required to complete the departmental honors program, a double major, minor, or certificate.

Requirements for the bachelor of arts degree program in history are 41 credits in history. Requirements for the bachelor of science in education degree program in social studies, concentrating on history, are a minimum of 30 credits in history within the 57 credits required for social studies certification.

Bachelor of Arts

History, BA

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities-History:

Fulfilled by required courses in major

Mathematics: 3

Liberal Studies Electives: 9

No courses with HIST prefix

College: 0-6

Foreign Language Intermediate Level (1)

Major: 41

Skills Courses: 8

HIST 295 - Introduction to Historical Studies **Credits: 2**

HIST 395 - Introduction to Historical Methods **Credits: 3**

Choose any three 1cr skills courses from:

HIST 215 - The Researcher as Detective **Credits: 1**

HIST 217 - Different Ways of Looking at the Past **Credits: 1**

HIST 218 - Right in Your Own Backyard: How to Do Local History **Credits: 1**

HIST 219 - Historians and the Public: Preserving and Presenting the Past **Credits: 1**

HIST 220 - Visual Sources in History **Credits: 3**

HIST 221 - The Historian's Craft **Credits: 1**

Foundation Courses: 9

Choose 3 from:

HIST 201 - Western Civilization before 1600 **Credits: 3**

HIST 202 - Western Civilization since 1600 **Credits: 3**

HIST 204 - United States History to 1877 **Credits: 3**

HIST 205 - United States History since 1877 **Credits: 3**

HIST 206 - The History of East Asia **Credits: 3**

HIST 207 - The History of the Middle East **Credits: 3**

Controlled Electives:

Three courses must fit into one theme; an additional course into a second theme. Note that many courses fit into two themes. At least ONE must be a Non-western HIST course: Latin America, Africa, Asia, Middle East or Russia, 300-400 level.

Theme: Society, Culture, the Environment

HIST 302 - History of Ancient Rome **Credits: 3**

HIST 304 - Medieval Europe II, 1000-1300 **Credits: 3**

HIST 305 - Renaissance and Reformation **Credits: 3**

HIST 306 - Early Modern Europe **Credits: 3**

HIST 312 - Europe, 1914-1945: The Age of Dictators and Imperiled Democracies **Credits: 3**

HIST 313 - Europe Since 1945: Division, Revolution, and Unity **Credits: 3**

HIST 323 - France, 1815 to the Present **Credits: 3**

HIST 326 - History of Russia **Credits: 3**

HIST 338 - The History of Iran **Credits: 3**

HIST 343 - Civil War and Reconstruction **Credits: 3**

HIST 346 - Recent United States History **Credits: 3**

HIST 350 - History of Latin America: Colonial Period, 1450-1820 **Credits: 3**

HIST 360

HIST 363 - Thought and Culture in Early America **Credits: 3**
HIST 365 - History of Black America since Emancipation **Credits: 3**
HIST 369 - Women in America **Credits: 3**
HIST 374 - History of Organized Crime **Credits: 3**
HIST 385 - People in Nature: An Introduction to Environmental History **Credits: 3**
HIST 433 - China 1300-1800: The Late Imperial Age **Credits: 3**
HIST 436 - Japan 1500-1850: Early Modern Japan **Credits: 3**
HIST 475 - History of American Constitutionalism **Credits: 3**

Theme: Transnational, Global and Comparative

HIST 307 - History of Europe: 1815-1914 **Credits: 3**
HIST 311 - Rise and Fall of Hitler's Empire **Credits: 3**
HIST 313 - Europe Since 1945: Division, Revolution, and Unity **Credits: 3**
HIST 322 - French Revolution and Napoleon **Credits: 3**
HIST 327 - Soviet Union and Contemporary Russia **Credits: 3**
HIST 331 - Modern Middle East **Credits: 3**
HIST 332 - History of Early China **Credits: 3**
HIST 339 - Jihad and the Origins of Islamist Movements in the Middle East **Credits: 3**
HIST 342 - The Early Republic **Credits: 3**
HIST 348 - Top Secret America: The Rise and Reach of the National Security State **Credits: 3**
HIST 351 - History of Latin America: National Period, 1820-Present **Credits: 3**
HIST 362 - History of American Diplomacy, 1900-present **Credits: 3**
HIST 385 - People in Nature: An Introduction to Environmental History **Credits: 3**
HIST 391 - Film as History **Credits: 3**
HIST 434 - Modern China 1800-present **Credits: 3**
HIST 437 - Modern Japan 1850-Present **Credits: 3**

Theme: Government, Nations, and Empires

HIST 302 - History of Ancient Rome **Credits: 3**
HIST 303 - Medieval Europe I, 400-1000 **Credits: 3**
HIST 304 - Medieval Europe II, 1000-1300 **Credits: 3**
HIST 305 - Renaissance and Reformation **Credits: 3**
HIST 307 - History of Europe: 1815-1914 **Credits: 3**
HIST 311 - Rise and Fall of Hitler's Empire **Credits: 3**
HIST 312 - Europe, 1914-1945: The Age of Dictators and Imperiled Democracies **Credits: 3**
HIST 320 - History of England to 1688 **Credits: 3**
HIST 322 - French Revolution and Napoleon **Credits: 3**
HIST 323 - France, 1815 to the Present **Credits: 3**
HIST 326 - History of Russia **Credits: 3**
HIST 327 - Soviet Union and Contemporary Russia **Credits: 3**
HIST 331 - Modern Middle East **Credits: 3**
HIST 332 - History of Early China **Credits: 3**
HIST 338 - The History of Iran **Credits: 3**
HIST 341 - American Revolution **Credits: 3**
HIST 342 - The Early Republic **Credits: 3**
HIST 343 - Civil War and Reconstruction **Credits: 3**
HIST 346 - Recent United States History **Credits: 3**
HIST 348 - Top Secret America: The Rise and Reach of the National Security State **Credits: 3**
HIST 350 - History of Latin America: Colonial Period, 1450-1820 **Credits: 3**
HIST 351 - History of Latin America: National Period, 1820-Present **Credits: 3**
HIST 360
HIST 365 - History of Black America since Emancipation **Credits: 3**
HIST 369 - Women in America **Credits: 3**
HIST 374 - History of Organized Crime **Credits: 3**
HIST 391 - Film as History **Credits: 3**

HIST 434 - Modern China 1800-present **Credits: 3**
HIST 437 - Modern Japan 1850-Present **Credits: 3**
HIST 475 - History of American Constitutionalism **Credits: 3**

Non-Western HIST Course

HIST 326 - History of Russia **Credits: 3**
HIST 327 - Soviet Union and Contemporary Russia **Credits: 3**
HIST 331 - Modern Middle East **Credits: 3**
HIST 332 - History of Early China **Credits: 3**
HIST 338 - The History of Iran **Credits: 3**
HIST 339 - Jihad and the Origins of Islamist Movements in the Middle East **Credits: 3**
HIST 350 - History of Latin America: Colonial Period, 1450-1820 **Credits: 3**
HIST 433 - China 1300-1800: The Late Imperial Age **Credits: 3**
HIST 434 - Modern China 1800-present **Credits: 3**
HIST 436 - Japan 1500-1850: Early Modern Japan **Credits: 3**
HIST 437 - Modern Japan 1850-Present **Credits: 3**

Other Requirements

Students must complete an honors thesis, double major, minor, or certificate.

Free Electives: 24-33

Total Degree Requirements: 120

(1) Intermediate-level foreign language may be included in Liberal Studies elective.

*During sophomore year each student, in consultation with their advisor, will select a specialization.

Public History Specialization: 12

Required: 9

HIST 420 - Introduction to Public History **Credits: 3**
HIST 499 - Topics in Public History **Credits: 3**

HIST 493 - Internship **Credits: 3-12**
or
appropriate substitution

Controlled Electives: 3

Choose one:

HIST 421 - Archival Studies **Credits: 3**
HIST 422 - History Museums and Historic Sites: Theory and Practice **Credits: 3**
HIST 423 - Oral History Practice **Credits: 3**

Public Service Specialization: 12

Required: 6

Choose one:

HIST 495 - Topics in United States History **Credits: 3**
HIST 496 - Topics in European History **Credits: 3**
HIST 497 - Topics in Non-Western History **Credits: 3**
HIST 498 - Topics in Comparative History **Credits: 3**

Choose one:

HIST 493 - Internship **Credits: 3-12**

or

appropriate substitution

Controlled Electives: 6

Choose two:

COMM 315 - Persuasive Media Writing **Credits: 3**
COMM 335 - Communications Consulting and Project Management **Credits: 3**
COMM 354 - Media Law and Policy **Credits: 3**

ECON 223 - Economics of Crime **Credits: 3**
ECON 335 - Public Finance **Credits: 3**
ECON 361 - Environmental Economics **Credits: 3**

ELR 314 - Health Policy and Law **Credits: 3**
ELR 480 - Introduction to Negotiations and Conflict Resolution **Credits: 3**

ENGL 310 - Public Speaking **Credits: 3**
ENGL 321 - Persuasive Speech and Writing **Credits: 3**

GEOG 231 - Economic Geography **Credits: 3**

GEOS 119 - Geology of Energy Resources **Credits: 3**
GEOS 151 - The Age of Dinosaurs **Credits: 3**
GEOS 156 - Geology of Natural Disasters **Credits: 3**

JRNL 126 - Introduction to Public Relations **Credits: 3**
JRNL 301 - Presentation Making **Credits: 3**

NURS 314 - Health Policy and Law **Credits: 3**

PLSC 351 - Legislative Process **Credits: 3**
PLSC 354 - Metropolitan Problems **Credits: 3**
PLSC 358 - Judicial Process **Credits: 3**

SOC 231 - Contemporary Social Problems **Credits: 3**
SOC 337 - Society, Globalization, and Risk **Credits: 3**
SOC 345 - Interpersonal Dynamics **Credits: 3**

WGS 200 - Introduction to Women's and Gender Studies **Credits: 3**

other appropriate substitutions with approval of advisor

Private Sector Specialization: 12

Required: 6

Choose one:

HIST 495 - Topics in United States History **Credits: 3**
HIST 496 - Topics in European History **Credits: 3**
HIST 497 - Topics in Non-Western History **Credits: 3**
HIST 498 - Topics in Comparative History **Credits: 3**

Choose one:

HIST 493 - Internship **Credits: 3-12**

or

appropriate substitution

Controlled Electives: 6

Choose two:

BLAW 235 - Legal Environment of Business **Credits: 3**

COMM 315 - Persuasive Media Writing **Credits: 3**

COMM 335 - Communications Consulting and Project Management **Credits: 3**

ECON 330 - Labor Economics **Credits: 3**

ECON 331 - Industrial Organization **Credits: 3**

ECON 345 - International Trade **Credits: 3**

ENGL 310 - Public Speaking **Credits: 3**

ENGL 321 - Persuasive Speech and Writing **Credits: 3**

HOSP 212 - Club Operations Management **Credits: 3**

HOSP 235 - Tourism Management **Credits: 3**

JRNL 105 - Journalism and the Mass Media **Credits: 3**

JRNL 126 - Introduction to Public Relations **Credits: 3**

JRNL 301 - Presentation Making **Credits: 3**

MGMT 105 - Introduction to Business **Credits: 3**

MGMT 275 - Introduction to Entrepreneurship **Credits: 3**

SOC 421 - Sociology of Mass Media **Credits: 3**

WGS 200 - Introduction to Women's and Gender Studies **Credits: 3**

other appropriate substitutions with approval of advisor

Pre-Law Specialization: 12

Required: 3

Choose one:

HIST 495 - Topics in United States History **Credits: 3**

HIST 496 - Topics in European History **Credits: 3**

HIST 497 - Topics in Non-Western History **Credits: 3**

HIST 498 - Topics in Comparative History **Credits: 3**

Controlled Electives: 9

Choose three from:

- HIST 320 - History of England to 1688 **Credits: 3**
- HIST 341 - American Revolution **Credits: 3**
- HIST 342 - The Early Republic **Credits: 3**
- HIST 346 - Recent United States History **Credits: 3**
- HIST 475 - History of American Constitutionalism **Credits: 3**

Other Requirements:

Take the Pre-law Interdisciplinary Minor.

Individual Specialization: 12

Required: 3

Choose one:

- HIST 495 - Topics in United States History **Credits: 3**
- HIST 496 - Topics in European History **Credits: 3**
- HIST 497 - Topics in Non-Western History **Credits: 3**
- HIST 498 - Topics in Comparative History **Credits: 3**

Controlled Electives: 9

9 credits from upper division HIST courses

Other Requirements:

Student must complete an honors thesis, double major, minor, or certificate.

Bachelor of Science in Education

History Track, Social Studies Education, BSED

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog. To student teach, students must have a 3.0 cumulative GPA in their major (social science and history courses). To be licensed to teach, education/history majors must apply for social studies education certification.

Liberal Studies: 43

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities-History:

Fulfilled by required courses in major

Mathematics: 3

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

ANTH 110 - Contemporary Anthropology **Credits: 3**
ECON 121 - Principles of Macroeconomics **Credits: 3**
PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 6

ECON 122 - Principles of Microeconomics **Credits: 3**
GEOG 230 - Cultural Geography **Credits: 3**
No courses with HIST prefix

College: 36

3 additional credits of MATH 101 level or above (in addition to Liberal Studies MATH) (1)
CHSS 142 - Introduction to Secondary Social Studies Education **Credits: 1**

Preprofessional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits: 3**
EDSP 102 - Educational Psychology **Credits: 3**

Professional Education Sequence:

CHSS 342 - Social Studies Teaching Lab **Credits: 1**
EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits: 2**
EDEX 323 - Instruction of English Language Learners with Special Needs **Credits: 2**
EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**
EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**
EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**
EDUC 441 - Student Teaching **Credits: 5-12**
EDUC 442 - School Law **Credits: 1**
EDUC 455 - Teaching of Social Studies in Secondary Schools **Credits: 3**

Major: 29

Foundation Courses:

(2)
HIST 201 - Western Civilization before 1600 **Credits: 3**
HIST 202 - Western Civilization since 1600 **Credits: 3**
HIST 204 - United States History to 1877 **Credits: 3**
HIST 205 - United States History since 1877 **Credits: 3**

Research Courses:

HIST 295 - Introduction to Historical Studies **Credits: 2**
HIST 395 - Introduction to Historical Methods **Credits: 3**
HIST 494 (3)

HIST 495 - Topics in United States History **Credits:** 3 (3)
HIST 496 - Topics in European History **Credits:** 3 (3)
HIST 497 - Topics in Non-Western History **Credits:** 3 (3)
HIST 498 - Topics in Comparative History **Credits:** 3 (3)

Controlled Electives: 9

One non-Western history course: Latin America, Africa, Asia, Middle East, or Russia, 300 or 400 level
One United States history course at the 300 or 400 level
One history course at the 300 or 400 level

Social Science Distribution: 12

GEOG XXX 200-level or higher GEOG course **Credits:** 3
PLSC 111 - American Government **Credits:** 3
PLSC 280 - Comparative Government I: Western Political Systems **Credits:** 3
or
PLSC 285 - Comparative Government II: Non-Western Political Systems **Credits:** 3
SOC 337 - Society, Globalization, and Risk **Credits:** 3
or
SOC 362 - Racial and Ethnic Minorities **Credits:** 3
or
SOC 231 - Contemporary Social Problems **Credits:** 3

Total Degree Requirements: 120

- (1) Students are required to take an additional 3cr of MATH beyond the Liberal Studies requirement for a total of 6cr, all of which must be 101 level or above.
- (2) In exceptional cases, the student's advisor may give special permission to substitute two upper-level courses for one of the foundation courses.
- (3) This requirement may be fulfilled by completing the departmental honors program or graduate seminar with a concluding paper.

Minor

History Minor

To minor in history, 18 credits of courses with an HIST prefix are required, with at least 6 credits taken at the 300 or higher level and no more than 3 credits taken at the 100 level. No more than 9 transfer credits may be counted toward the minor.

Certificate and Certification Programs

Digital History Certificate

Introduces skills that will prepare students to research, discover, preserve, and present history through digital and news media. Completion of the 18-credit certificate will enable students to pursue careers in education, virtual archive management, public history, and multimedia productions.

Core Courses: 9

One History course numbered 250 or below 3cr
One History course numbered 300 or above 3cr

HIST 379 - History in the Digital Age **Credits: 3**

Choose any three:

COMM 240 - Communications Graphics **Credits: 3**

COMM 249 - Basic Audio Recording Techniques **Credits: 3**

COMM 271 - Beginning Photography **Credits: 3**

COMM 306 - 2-D Digital Game Development **Credits: 3**

COMM 374 - Documentary Photography **Credits: 3**

COMM 440 - Multimedia Production **Credits: 3**

COMM 449 - Advanced Audio Recording Techniques **Credits: 3**

Total Certificate Requirements: 18

Public History Certificate

(1)

Prepares students for careers in the collection, preservation, and presentation of information about the past to the general public. This 18-credit certificate complements majors in related fields such as anthropology, communications media, and education. Completion of the certificate will prepare students to pursue positions in libraries, museums, archives, national parks, heritage sites, media, and corporations.

Core Courses: 6

HIST 204 - United States History to 1877 **Credits: 3**

or

HIST 205 - United States History since 1877 **Credits: 3**

HIST 420 - Introduction to Public History **Credits: 3**

Controlled Electives: 6

Either:

Option 1

Choose two Public History courses from:

HIST 421 - Archival Studies **Credits: 3**

HIST 422 - History Museums and Historic Sites: Theory and Practice **Credits: 3**

HIST 423 - Oral History Practice **Credits: 3**

Option 2

A 3cr internship

Choose one Public History Course from:

HIST 421 - Archival Studies **Credits: 3**

HIST 422 - History Museums and Historic Sites: Theory and Practice **Credits: 3**

HIST 423 - Oral History Practice **Credits: 3**

Electives: 6

Two 300-level or higher History

Total Certificate Requirements: 18

(1) No Public History courses (HIST 420, HIST 421, HIST 422, or HIST 423) may be counted toward the BSEd—Social Studies Education/History Track. Only one may be counted toward the BA—History or the BA—History/Pre-law Track.

Other Degrees

History Honors Program

The honors track is open by departmental permission to history, history/ pre-law, and social studies education/history majors with a minimum 3.25 cumulative GPA and a 3.5 GPA in history courses. All students write an honors thesis, which is completed over two semesters under the direction of a department professor who specializes in the student's area of interest. The thesis is approved by a thesis committee comprising the director and two other readers, one of whom may come from outside the History Department.

Honors students also take an honors (H) designated 300+ history class. All Honors history courses count toward the major.

Students interested in the History Honors Track should discuss this opportunity as early as possible with their advisors. Students may file a declaration of intent during the sophomore year; a formal application for admission must be made, normally early in the junior year. The program is particularly encouraged for students intending to seek admission to graduate or professional schools. Honors coursework is designated on university transcripts; students completing the departmental honors program are recognized at departmental commencement ceremonies.

Required Courses

HIST 483 - Honors Thesis **Credits:** 3-6 (1)

HIST (H) Honors designated 300+ history course **Credits:** 3

Total Honors Requirements: 9

(1) Two semesters, 3cr each.

Journalism and Public Relations

Website: www.iup.edu/journalism

Michele Papakie, Chair

A bachelor of arts degree with a major in journalism and public relations at IUP prepares students to thrive in a wide variety of career fields, such as news media, public relations, entertainment, magazines, advertising, visual journalism, online journalism, web design, marketing, and social media.

In addition to these traditional, journalistic career fields, department graduates combine their outstanding communication skills with other fields about which they are passionate and land jobs in hospitals, hotels, politics, advocacy, sports, and planning, just to name a few, where strategic communication is essential.

This major's curriculum is flexible enough to allow students to pick up a second major, or a minor, and still graduate within four years. This is how journalism and public relations majors differentiate themselves in the workforce.

With seven required courses (21 credits), students are empowered to individualize their degrees specifically in line with their interests and passions. Students choose six more major electives (18 additional credits), out of the 24 (72 credits) the department offers, to complete the major requirements.

Students in the College of Humanities and Social Sciences are also required to reach the intermediate level of a foreign language, which typically translates to three semesters (12 credits) of the student's choice of a foreign language. These requirements make journalism and public relations graduates more marketable.

For students who choose to major in another program at IUP, the department offers an 18-credit minor that complements any major.

Successful alumni of this program represent a network of professionals throughout communications industries. This network assists students who seek internships, which are plentiful and strongly encouraged. These practical experiences often lead to job opportunities after graduation. Employers know if students can communicate professionally, they can succeed. Students who choose to study journalism and public relations at IUP graduate as accomplished communicators.

Course Sequence

First Semester:	JRNL 102 and JRNL 105
Second Semester:	JRNL 220 plus one journalism and public relations elective (100- or 200-level)
Third Semester:	JRNL 328 and JRNL 347
Fourth Semester:	One journalism and public relations elective (200- or 300-level)
Fifth Semester:	One journalism and public relations elective (300- or 400-level)
Seventh Semester:	JRNL 400 plus one journalism and public relations elective (300- or 400-level)
Eighth Semester/Summer:	JRNL 493 - Internship (6cr)

The Journalism and Public Relations faculty offers the following operational policy for the course sequence and prerequisites.

Majors must complete JRNL 102, JRNL 105, JRNL 220, and JRNL 328 before completing 21cr in journalism and public relations. Eighteen credits must be at the 300- and 400-level.

No more than 6cr of special topics courses in journalism and public relations may count toward the 34cr required for the major.

Required courses requiring a grade of "C" or better may be retaken two times each. If a student fails to achieve a grade of "C" or better on the second attempt, he/she must meet with his/her advisor.

Students are advised to examine course prerequisites so their plan of study can be most effective. Exceptions can be made to the prerequisites only by the faculty member teaching the course after extensive consultation with the student to ascertain his/her readiness to succeed in that course. In the case of the required courses, that decision will be made by the department as a whole.

Seventy-two of the 120 credits required for graduation must be outside Journalism and Public Relations (JRNL) and Communications Media (COMM) and within the Colleges of Fine Arts, Humanities and Social Sciences, and Natural Sciences and Mathematics. Credits beyond the 48cr of combined JRNL and COMM courses will be in addition to the 120cr required for graduation. This requirement applies to dual majors.

Bachelor of Arts

Journalism and Public Relations, BA

Liberal Studies: 46-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

Social Science: 9

No courses with JRNL prefix to program requirements

Liberal Studies Electives:6-8

No courses with JRNL or COMM prefix

College: 0-8

Foreign Language Intermediate Level (1, 6)

Major: 39

Required Courses:

JRNL 102 - Basic Journalistic Skills **Credits:** 3 (2, 5)
JRNL 105 - Journalism and the Mass Media **Credits:** 3 (2)
JRNL 215 - Media Convergence in Journalism **Credits:** 3
JRNL 220 - Writing for Media **Credits:** 3 (2)
JRNL 328 - News Reporting **Credits:** 3 (2, 4)
JRNL 347 - Journalism Law and Ethics **Credits:** 3
JRNL 400 - Professional Preparation and Portfolio **Credits:** 3

Controlled Electives: 18

Other JRNL courses (as listed in this catalog) (3, 5)

Other Requirements:

Department recommends a planned program of dual major, minor(s), or electives (4)

Free Electives: 25-35

Total Degree Requirements: 120

- (1) Intermediate-level foreign language may be included in Liberal Studies electives.
- (2) A grade of "C" or better is required in these courses
- (3) A maximum of 6cr of internship can be applied to major.
- (4) Course is not eligible for transfer from any other institution.
- (5) The last 15cr in journalism and public relations must be taken at IUP.
- (6) The foreign language requirement applies to all double majors.

Minor

Journalism and Public Relations Minor

- (1)

Required Courses:

JRNL 102 - Basic Journalistic Skills **Credits:** 3 (1)
JRNL 105 - Journalism and the Mass Media **Credits:** 3 (1)
JRNL 120 - Journalistic Techniques for Professional Writing **Credits:** 3 (2)

Controlled Electives:

JRNL course of 300-level or higher **Credits:** 3

JRNL course of 300-level or higher **Credits:** 3

JRNL free elective **Credits:** 3

Total Minor Requirements: 18

(1) A grade of "C" or better is required for graduation with a minor in journalism and public relations.

(2) JRNL 102 is a prerequisite for JRNL 120.

Philosophy

Website: www.iup.edu/philosophy

Mary C. MacLeod, Chair

The discipline of philosophy involves sustained, rigorous focus on some of the deepest questions human beings ask, questions about the nature of reality, thought and consciousness, the scope and limits of human knowledge, the value and essence of art, and the foundations of ethics and justice. Philosophy distinguishes itself by its methods: unpacking concepts, questioning beliefs, evaluating arguments, and examining the methods and assumptions of other disciplines, including natural science, social science, law, and fine arts. Interdisciplinary focus is inherent in philosophy, and most courses offered by the department are designed to be accessible to a broad range of students, not just those majoring in philosophy.

Students of philosophy learn to read carefully, think independently, communicate clearly, argue cogently, spot fallacies, clarify muddled reasoning, and identify questionable assumptions. Surveys show that such critical reasoning and analytical writing skills are those most sought by potential employers. Standardized exams for graduate, business, and law school test for such skills, and the data demonstrate that philosophy majors do extraordinarily well on them. Historically, according to Educational Testing Service data, philosophy majors outperform all other majors on both the Verbal Reasoning section and the Analytical Writing section of the Graduate Record Exam (GRE).

Two-degree programs are available: a bachelor of arts degree program in philosophy and a bachelor of arts degree program in philosophy/pre-law. A Philosophy minor is also offered. The Philosophy BA is best suited to students intending a broad education in philosophy. Some philosophy majors earn advanced degrees and pursue academic careers, but most pursue careers in law, medicine, public service, business, or information technology. The Philosophy/Pre-law Track is designed for students intending to pursue an advanced degree in law and provides ideal training in the skills required for close, critical reading of legal texts, a fact borne out by law school admissions rates and LSAT performance data.

A significant number of students interested in exploring interdisciplinary connections choose philosophy as a second major, both for its flexibility and the new perspective it provides on the primary major. Course work in metaphysics (PHIL 420), the philosophy of science (PHIL 330), and the theory of knowledge (PHIL 421) deepens students' understanding of the methods and assumptions of natural science and social science. Course work in the history of ideas deepens students' appreciation of the Western intellectual tradition and their understanding of academic pursuits, generally (PHIL 324, PHIL 325, and PHIL 326). Course work in ethics (PHIL 122) and political philosophy (PHIL 323) provides orientation for work in social science, business, law, criminology, or safety science. Philosophers also take a distinctive perspective on aesthetic questions of interest to fine arts majors (PHIL 223) and questions about the nature of the mind of interest to psychology majors (PHIL 360).

Bachelor of Arts

Philosophy, BA

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

Liberal Studies Electives: 6

No courses with PHIL prefix

College: 0-8

Foreign Language Intermediate Level (1)

Major: 30

Required Courses:

- PHIL 221 - Symbolic Logic I **Credits: 3**
- PHIL 324 - Ancient Greek Philosophy **Credits: 3**
- PHIL 325 - Early Modern European Philosophy **Credits: 3**

Controlled Electives:

Three PHIL courses (9cr) (with restrictions) **Credits: 9 (2, 3)**

Two Courses from the Following:

At least two courses from the following two categories

Knowledge and Reality: 6

Six credits from the following:

- PHIL 330 - Philosophy of Science **Credits: 3**
- PHIL 350 - The Human Experience of Time **Credits: 3**
- PHIL 360 - Philosophy of Mind **Credits: 3**
- PHIL 390 - Philosophy of Human Nature **Credits: 3**
- PHIL 420 - Metaphysics **Credits: 3**
- PHIL 421 - Theory of Knowledge **Credits: 3**
- PHIL 460 - Philosophy of Language **Credits: 3**

Ethics and Values: 6

Six credits from the following:

- PHIL 223 - Philosophy of Art **Credits: 3**
- PHIL 240 - Philosophy and the Good Life **Credits: 3**
- PHIL 270 - Ethics and the Environment **Credits: 3**
- PHIL 320 - Ethical Theory **Credits: 3**
- PHIL 323 - Political Philosophy **Credits: 3**
- PHIL 326 - Existentialism **Credits: 3**
- PHIL 450 - Philosophy of Law **Credits: 3**

Free Electives: 35-44

Total Degree Requirements: 120

(1) Intermediate-level foreign language may be included in Liberal Studies electives.

(2) In addition to PHIL 221, no more than four 100- and 200-level courses may be counted toward the major. Only PHIL courses may be counted toward the major.

(3) No more than 9 non-classwork credits may be counted toward the major. Non-classwork credits include independent study, independent honors project, and internship in philosophy.

Minor

Philosophy Minor

Controlled Electives: 18

Six PHIL courses (with restrictions) (1, 2)

Total Minor Requirements: 18

(1) No more than three 100- and 200-level courses may be counted toward the minor. Only PHIL courses may be counted toward the minor. Unless otherwise indicated in the Course Descriptions, all 300- and 400-level courses require either philosophy major or minor status, junior or senior standing, or permission of the instructor.

(2) No more than 3 non-classwork credits may be counted toward the minor. Non-classwork credits include independent study, independent honors project, and internship in philosophy.

Other Degrees

Philosophy Honors Program

The department offers students an opportunity to graduate with honors in philosophy. The option is encouraged for students intending to pursue graduate or advanced professional degrees. Philosophy majors and philosophy/ pre-law majors may be invited to apply or may nominate themselves. In either case, to be considered for Honors in Philosophy, students must have earned at least 60 credits in total, with a minimum 3.25 cumulative GPA and a minimum 3.5 GPA in philosophy courses. Honors in Philosophy requires completion of a two-semester, 6-credit, Honors Thesis Independent Study. The honors thesis is completed individually under the direction of a department professor who specializes in the student's area of interest and is approved by a thesis committee comprising the director and two other readers. To determine how honors will be integrated into existing requirements for the philosophy or philosophy/pre-law major, students should consult their assigned advisors. Students completing the departmental honors program are recognized at departmental commencement ceremonies.

Required Course:

PHIL 483 - Honors Thesis **Credits:** 1-6 (Honors)

Total Honors Requirements: 6

Political Science

Website: www.iup.edu/politicalscience

David D. Chambers, Chair

Political scientists focus on political systems, including the effect of environment on the system, inputs, the decision-making agencies that render binding public policies, and system outputs. Approaches to the study of government and politics include the normative approach, in which

philosophical attention centers on values by asking the question "What ought to be?" and the behavioral approach, in which an attempt is made to develop verifiable theories through scientific methods by asking the questions "How?" and "Why?"

Students majoring in political science have employment opportunities in federal, state, and local governments and with private civic groups, interest groups, and political groups. Students who go on to graduate work find appointments at higher levels and in college teaching. Students graduating in political science, as in any of the social sciences, are in demand by employers in business and industry. Students completing the political science internship program have experienced considerable success in finding employment upon graduation. The political science major is also especially suitable for the pre-law student.

Degree programs offered by the Political Science Department are the bachelor of arts degree programs in political science or political science/pre-law. An interdisciplinary major and an International Studies minor are sponsored by the Political Science Department. The department also offers a Political Science minor and a Homeland Security minor.

Bachelor of Arts

Homeland Security Track, Political Science, BA

Homeland security is the intersection of evolving threats, to include terrorism and other risks to national security, and natural and man-made hazards with traditional governmental and civic responsibilities. This multi-disciplinary track is built upon a political science core (required courses), with an emphasis on administration and policy (controlled electives). Students will choose between specializing in Homeland Defense or Emergency Management. The Homeland Defense specialization will focus on identifying risks to the homeland's security and essential infrastructure, and developing policy and strategy that mitigate, if not obviate, these risks. The Emergency Management track will focus on the twin facets of program administration and emergency management, sometimes called disaster or crisis management. The Political Science/Homeland Security major track emphasizes critical and creative thinking, information literacy, oral and written communications, interpersonal relations and teamwork. The knowledge and skills students will gain will prepare them to work in private businesses; emergency and safety management; private security; airports and border patrol; local, state, and federal law enforcement; and military service.

Liberal Studies: 46-47

As outlined in Liberal Studies Requirements section with the following specifications

Mathematics: 3

Social Science:

PLSC 111 - American Government **Credits: 3**

Liberal Studies Electives: 6

No courses with PLSC prefix

College: 0-6

Foreign Language Intermediate Level (1)

Major:33

Required Courses:

PLSC 101 - World Politics **Credits: 3 (2)**

PLSC 111 - American Government **Credits: 3 (3)**

PLSC 260 - Contemporary Political Ideas **Credits: 3**
PLSC 270 - Fundamentals of Homeland Security **Credits: 3**
PLSC 300 - Research Methods in Political Science **Credits: 3**

Controlled Electives: 9

Students must take three of the following controlled electives in the area of public policy/administration:

PLSC 250 - Public Policy **Credits: 3**
PLSC 355 - Intergovernmental Relations **Credits: 3**
PLSC 370 - The Practice of Public Administration **Credits: 3**
PLSC 372 - Constitutional Issues in Homeland Security **Credits: 3**
PLSC 375 - Crisis Management and Decision Making **Credits: 3**

Specializations:

Students must take four courses in their specialization. At least two courses must have a prefix other than PLSC.

Homeland Defense: 12

BCOM 342 - Intercultural Business Communication **Credits: 3**
COMM 101 - Introduction to Communications, Media, and Culture **Credits: 3**
COSC 356 - Network Security **Credits: 3**
COSC 429 - Digital Forensics **Credits: 3**
COSC 454 - Information Assurance Administration **Credits: 3**
CRIM 205 - Policing and the Community **Credits: 3**
CRIM 255 - Law, Social Control, and Society **Credits: 3**
CRIM 321 - Cybersecurity and Loss Prevention **Credits: 3**
CRIM 323 - Cybersecurity and the Law **Credits: 3**
CRIM 344 - Terrorism **Credits: 3**
or
PLSC 344 - Terrorism **Credits: 3**
GEOG 316 - Introduction to Geographic Information Systems **Credits: 3**
or
RGPL 316 - Introduction to Geographic Information Systems **Credits: 3**
HIST 339 - Jihad and the Origins of Islamist Movements in the Middle East **Credits: 3**
or
PLSC 339 - Jihad and the Origins of Islamist Movements in the Middle East **Credits: 3**
HIST 348 - Top Secret America: The Rise and Reach of the National Security State **Credits: 3**
or
PLSC 348 - Top Secret America: The Rise and Reach of the National Security State **Credits: 3**
PLSC 350 - The Presidency **Credits: 3**
PLSC 388 - Dimensions of National Security **Credits: 3 (4)**
PLSC 465 - Intelligence Process and Policy **Credits: 3**
SOC 337 - Society, Globalization, and Risk **Credits: 3**

Emergency Management: 12

BIOL 107 - Introduction to Forensic Biology **Credits: 3**
BIOL 119 - Emerging Diseases **Credits: 3**
BIOL 221 - Environmental Health and Protection **Credits: 4**
BCOM 342 - Intercultural Business Communication **Credits: 3**
CHEM 105 - The Forensic Chemistry of CSI **Credits: 3**
COMM 101 - Introduction to Communications, Media, and Culture **Credits: 3**
CRIM 205 - Policing and the Community **Credits: 3**
CRIM 255 - Law, Social Control, and Society **Credits: 3**

CRIM 374 - Environmental Crime and Justice **Credits: 3**
CRIM 401 - Contemporary Issues in Criminology **Credits: 3**
GEOG 101 - Environment and Society **Credits: 3**
GEOG/RGPL Urban Landscapes **Credits: 3**
GEOG 316 - Introduction to Geographic Information Systems **Credits: 3**
or
RGPL 316 - Introduction to Geographic Information Systems **Credits: 3**
GEOG 341 - Climatology **Credits: 3**
or
RGPL 341 - Climatology **Credits: 3**
GEOG 343 - Fresh Water Resources **Credits: 3**
or
RGPL 343 - Fresh Water Resources **Credits: 3**
NMDT 430 - Radiation Biology and Radiation Protection **Credits: 2**
NURS 101 - Disaster Awareness **Credits: 1**
PHYS 101 - Energy and Our Environment **Credits: 3**
SOC 337 - Society, Globalization, and Risk **Credits: 3**
SAFE 220 - Hazardous Materials and Emergency Management **Credits: 3**

Free Electives: 34- 41

Total Degree Requirements: 120

- (1) Intermediate-level foreign language may be included in Liberal Studies electives.
- (2) PLSC 101 satisfies the global and multicultural awareness requirement.
- (3) Credits for PLSC 111 are counted in the Liberal Studies social science requirements.
- (4) PLSC 280 and/or PLSC 285 is recommended as a prerequisite for PLSC 388.

International Studies/Political Science, BA

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

Social Science:

PLSC 111 - American Government **Credits: 3**

Liberal Studies Electives: 6

No courses with PLSC prefix

College: 0-6

Foreign Language Intermediate Level (1)

Major: 33

Required Courses:

- PLSC 101 - World Politics **Credits: 3**
- PLSC 111 - American Government **Credits: 3 (2)**
- PLSC 260 - Contemporary Political Ideas **Credits: 3**
- PLSC 282 - International Relations **Credits: 3**
- PLSC 300 - Research Methods in Political Science **Credits: 3**

Specializations:

International Political Economy: 21

Required specialization course:

- PLSC 422 - International Law and Organizations **Credits: 3**

Six Courses from the Following:

- ACCT 471
- BCOM 342 - Intercultural Business Communication **Credits: 3**
- COMM 320
- ECON 121 - Principles of Macroeconomics **Credits: 3**
- ECON 325 - Monetary Economics I **Credits: 3**
- ECON 339 - Economic Development I **Credits: 3**
- ECON 345 - International Trade **Credits: 3**
- ECON 346 - International Finance **Credits: 3**
- ECON 350
- FSMR 357 - Global Issues in Textiles and Apparel **Credits: 3**
- GEOG 231 - Economic Geography **Credits: 3**
- GEOG 333 - Trade and Transportation **Credits: 3**
- MGMT 350 - International Business **Credits: 3**
- MGMT 451 - International Management **Credits: 3**
- MGMT 454 - International Competitiveness **Credits: 3**
- MGMT 459 - Seminar in International Management **Credits: 3**
- MKTG 350 - International Business **Credits: 3**
- MKTG 430 - International Marketing **Credits: 3**
- PLSC 361 - Modern Political Thought **Credits: 3**
- PLSC 383 - Political Systems: Asia **Credits: 3**
- SOC 337 - Society, Globalization, and Risk **Credits: 3**

International Security Studies: 21

Required specialization course:

- PLSC 283 - American Foreign Policy **Credits: 3**
- or
- PLSC 388 - Dimensions of National Security **Credits: 3**
- or
- PLSC 465 - Intelligence Process and Policy **Credits: 3**

Six Courses from the Following:

*(if not taken as the required specialization course)

BIOL 117 - Understanding HIV Biology and AIDS **Credits: 3**
BIOL 119 - Emerging Diseases **Credits: 3**
CRIM 344 - Terrorism **Credits: 3**
ECON 361 - Environmental Economics **Credits: 3**
GEOG 230 - Cultural Geography **Credits: 3**
GEOG 331 - Population Geography **Credits: 3**
GEOG 334 - Political Geography **Credits: 3**
GEOG 335
GEOG 341 - Climatology **Credits: 3**
HIST 251 - United States Military History **Credits: 3**
HIST 308
HIST 361
HIST 362 - History of American Diplomacy, 1900-present **Credits: 3**
JRNL 375 - World News Coverage **Credits: 3**
PLSC 283 - American Foreign Policy **Credits: 3 ***
PLSC 422 - International Law and Organizations **Credits: 3**
PLSC 388 - Dimensions of National Security **Credits: 3 ***
PLSC 465 - Intelligence Process and Policy **Credits: 3 ***
RLST 110 - World Religions **Credits: 3**
RLST 200

International Political Systems: 21

Required specialization course:

PLSC 280 - Comparative Government I: Western Political Systems **Credits: 3**
or
PLSC 285 - Comparative Government II: Non-Western Political Systems **Credits: 3**
or
PLSC 389 - International Development Strategies **Credits: 3**

Six Courses from the Following:

*(if not taken as the required specialization course)

ANTH 271 - Cultural Area Studies: Africa **Credits: 3**
ANTH 272 - Culture Area: China **Credits: 3**
ANTH 274 - Cultural Area Studies: Latin America **Credits: 3**
ANTH 370 - Latinos and Diasporas **Credits: 3**
ASIA 200 - Introduction to Asian Studies **Credits: 3**
ENGL 226 - Survey of Global Literature Since 1900 **Credits: 3**
ENGL 398 - Global Genres **Credits: 3**
ENGL 437
ENGL 463 - Topics in Global Literature and Film **Credits: 3**
FNLG 100
FRNC 254
GEOG 104 - World Geography: Global Context **Credits: 3**
GEOG 254 - Geography of Russia, Central Eurasia, and Eastern Europe **Credits: 3**
GEOG 255 - Geography of Africa **Credits: 3**
GEOG 257 - Geography of South and Southwest Asia **Credits: 3**
GEOG 331 - Population Geography **Credits: 3**
HIST 206 - The History of East Asia **Credits: 3**
HIST 208
HIST 307 - History of Europe: 1815-1914 **Credits: 3**

HIST 308
 HIST 311 - Rise and Fall of Hitler's Empire **Credits: 3**
 HIST 312 - Europe, 1914-1945: The Age of Dictators and Imperiled Democracies **Credits: 3**
 HIST 313 - Europe Since 1945: Division, Revolution, and Unity **Credits: 3**
 HIST 321
 HIST 322 - French Revolution and Napoleon **Credits: 3**
 HIST 323 - France, 1815 to the Present **Credits: 3**
 HIST 325
 HIST 327 - Soviet Union and Contemporary Russia **Credits: 3**
 HIST 331 - Modern Middle East **Credits: 3**
 HIST 351 - History of Latin America: National Period, 1820-Present **Credits: 3**
 HIST 356
 PLSC 280 - Comparative Government I: Western Political Systems **Credits: 3 ***
 PLSC 285 - Comparative Government II: Non-Western Political Systems **Credits: 3 ***
 PLSC 383 - Political Systems: Asia **Credits: 3**
 PLSC 384 - Political Systems: Middle East **Credits: 3**
 PLSC 387 - Political Systems: Latin America **Credits: 3**
 PLSC 389 - International Development Strategies **Credits: 3 ***
 PNAF 131 - Introduction to Pan-African Studies **Credits: 3**
 RLST 311 - Eastern Philosophy **Credits: 3**
 RLST 360 - African Religions **Credits: 3**
 RLST 370 - Religions: China and Japan **Credits: 3**
 RLST 372
 RLST 373
 RLST 374 - Buddhism **Credits: 3**
 RLST 380 - Islam **Credits: 3**
 SOC 271
 SOC 273
 SOC 274
 SPAN 342 - Spanish Cultures from the 19th Century to the Present **Credits: 3**
 SPAN 382 - Contemporary Spain **Credits: 3**
 SPAN 383 - Geography and History of Spain **Credits: 3**
 SPAN 384 - History of Spanish Art **Credits: 3**
 SPAN 385 - Survey of Spanish Literature **Credits: 3**
 SPAN 410 - Medieval Literature **Credits: 3**
 SPAN 411 - Golden Age Spanish **Credits: 3**
 SPAN 412 - The Spanish Novel of the 19th and 20th Centuries **Credits: 3**

Other Requirements:

(3)

Free Electives: 34-41

Total Degree Requirements: 120

(1) Intermediate-level foreign language may be included in Liberal Studies electives.

(2) Credits for PLSC 111 are counted in the Liberal Studies social science requirements.

(3) Majors are strongly encouraged to take advantage of the study abroad opportunities available through IUP departmental programs and of exchange opportunities available through the Office of International Education.

Political Science, BA

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

Social Science:

PLSC 111 - American Government **Credits: 3**

Liberal Studies Electives: 6

No courses with PLSC prefix

College: 0-6

Foreign Language Intermediate Level (1)

Major: 33

Required Courses:

PLSC 101 - World Politics **Credits: 3 (2)**

PLSC 111 - American Government **Credits: 3 (3)**

PLSC 260 - Contemporary Political Ideas **Credits: 3**

PLSC 300 - Research Methods in Political Science **Credits: 3**

Controlled Electives: 24

At least one course in three of the four areas:

American Studies:

PLSC 251 - State and Local Political Systems **Credits: 3**

PLSC 346

PLSC 350 - The Presidency **Credits: 3**

PLSC 351 - Legislative Process **Credits: 3**

PLSC 353

PLSC 354 - Metropolitan Problems **Credits: 3**

PLSC 355 - Intergovernmental Relations **Credits: 3**

PLSC 356

PLSC 358 - Judicial Process **Credits: 3**

PLSC 359 - Constitutional Law and Civil Liberties **Credits: 3**

Political Theory:

PLSC 360 - Classical Political Thought **Credits: 3**

PLSC 361 - Modern Political Thought **Credits: 3**

Public Policy and Administration:

PLSC 250 - Public Policy **Credits: 3**

PLSC 370 - The Practice of Public Administration **Credits: 3**

International Studies:

PLSC 280 - Comparative Government I: Western Political Systems **Credits: 3**

PLSC 282 - International Relations **Credits: 3**

PLSC 283 - American Foreign Policy **Credits: 3**

PLSC 285 - Comparative Government II: Non-Western Political Systems **Credits: 3**

PLSC 382 - Political Systems: Africa **Credits: 3**

PLSC 383 - Political Systems: Asia **Credits: 3**

PLSC 384 - Political Systems: Middle East **Credits: 3**

PLSC 385 - Political Systems: Central and Eastern Europe **Credits: 3**

PLSC 387 - Political Systems: Latin America **Credits: 3**

PLSC 388 - Dimensions of National Security **Credits: 3**

PLSC 389 - International Development Strategies **Credits: 3**

PLSC 422 - International Law and Organizations **Credits: 3**

PLSC 465 - Intelligence Process and Policy **Credits: 3 (4)**

Free Electives: 34-41

Total Degree Requirements: 120

- (1) Intermediate-level foreign language may be included in Liberal Studies electives.
- (2) PLSC 101 satisfies the global and multicultural awareness requirement.
- (3) Credits for PLSC 111 are counted in the Liberal Studies social science requirements.
- (4) PLSC 280 and/or PLSC 285 recommended as prerequisite to PLSC 380 through PLSC 389.

Pre-law Track, Political Science, BA

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

Social Science:

PLSC 111 - American Government **Credits: 3**

Liberal Studies Electives: 6

No course with PLSC prefix

College: 0-6

Foreign Language Intermediate Level (1)

Major: 33

Required Courses:

- PLSC 101 - World Politics **Credits: 3 (2)**
- PLSC 111 - American Government **Credits: 3 (3)**
- PLSC 260 - Contemporary Political Ideas **Credits: 3**
- PLSC 300 - Research Methods in Political Science **Credits: 3**

Controlled Electives: 24

At least one course in three of the four areas:

American Studies:

- PLSC 251 - State and Local Political Systems **Credits: 3**
- PLSC 346
- PLSC 350 - The Presidency **Credits: 3**
- PLSC 351 - Legislative Process **Credits: 3**
- PLSC 353
- PLSC 354 - Metropolitan Problems **Credits: 3**
- PLSC 355 - Intergovernmental Relations **Credits: 3**
- PLSC 356
- PLSC 358 - Judicial Process **Credits: 3**
- PLSC 359 - Constitutional Law and Civil Liberties **Credits: 3**

Political Theory:

- PLSC 360 - Classical Political Thought **Credits: 3**
- PLSC 361 - Modern Political Thought **Credits: 3**

Public Policy and Administration:

- PLSC 250 - Public Policy **Credits: 3**
- PLSC 370 - The Practice of Public Administration **Credits: 3**

International Studies:

- PLSC 280 - Comparative Government I: Western Political Systems **Credits: 3**
- PLSC 282 - International Relations **Credits: 3**
- PLSC 283 - American Foreign Policy **Credits: 3**
- PLSC 285 - Comparative Government II: Non-Western Political Systems **Credits: 3**
- PLSC 382 - Political Systems: Africa **Credits: 3**
- PLSC 383 - Political Systems: Asia **Credits: 3**
- PLSC 384 - Political Systems: Middle East **Credits: 3**
- PLSC 385 - Political Systems: Central and Eastern Europe **Credits: 3**
- PLSC 387 - Political Systems: Latin America **Credits: 3**
- PLSC 388 - Dimensions of National Security **Credits: 3**
- PLSC 389 - International Development Strategies **Credits: 3**
- PLSC 422 - International Law and Organizations **Credits: 3**
- PLSC 465 - Intelligence Process and Policy **Credits: 3 (4)**

Other Requirements: Pre-law Interdisciplinary Track: 21

Seven courses, including at least one from each of six areas:

Business:

ACCT 201 - Accounting Principles I **Credits: 3**
ACCT 202 - Accounting Principles II **Credits: 3**
BLAW 235 - Legal Environment of Business **Credits: 3**

Criminology:

CRIM 210 - Criminal Law **Credits: 3**
CRIM 215 - Survey of Courts and the Criminal Justice System **Credits: 3**
CRIM 225 - Survey of Corrections **Credits: 3**
CRIM 255 - Law, Social Control, and Society **Credits: 3**

Economics:

ECON 121 - Principles of Macroeconomics **Credits: 3**
ECON 122 - Principles of Microeconomics **Credits: 3**
ECON 332

English:

ENGL 212 - American Literature: Beginnings to 1900 **Credits: 3**
ENGL 227 - Introduction to Legal Writing **Credits: 3**
ENGL 265 - Law and Literature **Credits: 3**
ENGL 310 - Public Speaking **Credits: 3**
ENGL 321 - Persuasive Speech and Writing **Credits: 3**

History:

HIST 320 - History of England to 1688 **Credits: 3**
HIST 341 - American Revolution **Credits: 3**
HIST 342 - The Early Republic **Credits: 3**
HIST 346 - Recent United States History **Credits: 3**
HIST 475 - History of American Constitutionalism **Credits: 3**

Philosophy:

PHIL 101 - Critical Thinking **Credits: 3**
PHIL 122 - Contemporary Moral Issues **Credits: 3**
PHIL 130 - Introduction to Biomedical Ethics **Credits: 3**
PHIL 221 - Symbolic Logic I **Credits: 3**
PHIL 270 - Ethics and the Environment **Credits: 3**
PHIL 320 - Ethical Theory **Credits: 3**
PHIL 450 - Philosophy of Law **Credits: 3**

Free Electives: 13-20

Total Degree Requirements: 120

- (1) Intermediate-level foreign language may be included in Liberal Studies electives.
- (2) PLSC 101 satisfies the global and multicultural awareness requirement.
- (3) Credits for PLSC 111 are counted in the Liberal Studies social science requirements.
- (4) PLSC 280 and/or PLSC 285 recommended as prerequisite to PLSC 380 through PLSC 389.

Minor

Homeland Security Minor

Required Courses:

- PLSC 101 - World Politics **Credits:** 3 (1)
- PLSC 111 - American Government **Credits:** 3 (1)
- PLSC 283 - American Foreign Policy **Credits:** 3
- PLSC 344 - Terrorism **Credits:** 3
- or
- CRIM 344 - Terrorism **Credits:** 3
- PLSC 388 - Dimensions of National Security **Credits:** 3
- PLSC 465 - Intelligence Process and Policy **Credits:** 3

Total Minor Requirements: 18

- (1) Must be completed before taking additional courses in the minor.

International Studies Minor

Required Courses:

- PLSC 101 - World Politics **Credits:** 3

Controlled Electives: 15

Five additional PLSC courses (15cr) from the following, at least two of which must be 300 level or higher:

- PLSC 280 - Comparative Government I: Western Political Systems **Credits:** 3
- PLSC 282 - International Relations **Credits:** 3
- PLSC 283 - American Foreign Policy **Credits:** 3
- PLSC 285 - Comparative Government II: Non-Western Political Systems **Credits:** 3
- PLSC 383 - Political Systems: Asia **Credits:** 3
- PLSC 384 - Political Systems: Middle East **Credits:** 3
- PLSC 387 - Political Systems: Latin America **Credits:** 3
- PLSC 388 - Dimensions of National Security **Credits:** 3
- PLSC 389 - International Development Strategies **Credits:** 3
- PLSC 422 - International Law and Organizations **Credits:** 3
- PLSC 465 - Intelligence Process and Policy **Credits:** 3

Total Minor Requirements: 18

Political Science Minor

Required Courses:

PLSC 101 - World Politics **Credits:** 3

PLSC 111 - American Government **Credits:** 3

Controlled Electives: 12

Four additional PLSC courses, at least two of which must be 300 level or higher

Total Minor Requirements: 18

Religious Studies

Website: www.iup.edu/religiousstudies

Theresa S. Smith, Chair

The Religious Studies program is designed to provide a balanced, nonsectarian, cross-cultural approach leading to a better understanding of the phenomenon of religion in human experience. It emphasizes an interdisciplinary approach and encourages the minor or a double major, as well as a single major in religious studies.

The program is valuable for those planning to teach about religions or religious studies in schools at the primary, secondary, or college level. The program also provides an excellent background for graduates planning to enter Catholic, Jewish, or Protestant seminaries. Additionally, religious studies is a good complement to majors in such fields as anthropology, English, fine arts, history, international studies, music, philosophy, political science, psychology, and sociology.

Liberal Studies Offerings

The Religious Studies program's Liberal Studies courses are all introductory in nature; none presupposes any religious studies background. The student may choose from RLST 100 and RLST 110.

Bachelor of Arts

Religious Studies, BA

Liberal Studies: 46-48

As outlined in Liberal Studies Requirements section with the following specifications:

Mathematics: 3

Liberal Studies Electives: 6-9

No courses with RLST prefix

College: 0-8

Foreign Language Intermediate Level (1)

Major: 30

Controlled Electives:

(2)

Core:

RLST 300 - Methodologies of Religious Studies **Credits: 3**

Abrahamic:

RLST 380 - Islam **Credits: 3**

or

RLST 385 - Christianity **Credits: 3**

or

RLST 388 - Interpreting the Bible **Credits: 3**

Asian:

RLST 311 - Eastern Philosophy **Credits: 3**

RLST 370 - Religions: China and Japan **Credits: 3**

RLST 374 - Buddhism **Credits: 3**

RLST 375 - Religions of India **Credits: 3**

RLST 378 - Hinduism **Credits: 3**

Indigenous:

RLST 360 - African Religions **Credits: 3**

or

RLST 365 - Native North American Religions **Credits: 3**

Capstone Course

One capstone course:

RLST 401 - Topics in Abrahamic Traditions **Credits: 3**

RLST 402 - Topics in Asian Religions **Credits: 3**

RLST 403 - Topics in Indigenous Religions **Credits: 3**

Additional RLST Courses

Five additional RLST courses **Credits: 15 (3)**

Free Electives: 34-44

Total Degree Requirements: 120

(1) Intermediate-level foreign language may be included in the Liberal Studies electives.

(2) Other courses may be approved in consultation with advisor.

(3) Consult religious studies advisor.

Minor

Religious Studies Minor

The requirements for a minor are 18 credits with the RLST prefix, including certain required courses. At least 6 credits must be taken at the 300 level or higher.

Required Courses:

Core:

RLST 300 - Methodologies of Religious Studies **Credits: 3**

Abrahamic:

RLST 380 - Islam **Credits: 3**

or

RLST 385 - Christianity **Credits: 3**

or

RLST 388 - Interpreting the Bible **Credits: 3**

Asian:

One of the following:

RLST 311 - Eastern Philosophy **Credits: 3**

RLST 370 - Religions: China and Japan **Credits: 3**

RLST 373

RLST 375 - Religions of India **Credits: 3**

RLST 378 - Hinduism **Credits: 3**

Indigenous:

RLST 360 - African Religions **Credits: 3**

or

RLST 365 - Native North American Religions **Credits: 3**

Capstone Course:

One capstone course:

RLST 401 - Topics in Abrahamic Traditions **Credits: 3**

RLST 402 - Topics in Asian Religions **Credits: 3**

RLST 403 - Topics in Indigenous Religions **Credits: 3**

Elective:

One RLST course **Credits: 3**

Total Minor Requirements: 18

(1) At least 6cr must be taken at the 300 level or higher.

Other Degrees

Religious Studies Honors Program

The honors program is open by departmental invitation to religious studies majors with a minimum 3.25 cumulative GPA and a 3.5 GPA in religious studies courses. Students complete RLST 480/H/, RLST 483/H/, and RLST 493/H/. To determine how Honors Track courses will be integrated into existing requirements for the religious studies major, students should consult their advisors.

Required Courses:

RLST 480 - Seminar in Religious Studies **Credits:** 3 (Honors)

RLST 483 - Honors Thesis **Credits:** 1-6 (Honors)

RLST 493 - Internship in Religious Studies **Credits:** 3-12 (Honors)

Total Honors Requirements: 12

Sociology

Website: www.iup.edu/sociology

Dana Hysock Witham, Chair

The Department of Sociology seeks to develop both the scientific and humanistic foundations of sociology, to educate the wider community as to the significance of sociological knowledge, to apply sociological knowledge to current social problems, and to advance the profession by promoting the welfare of individuals and society. The discipline of sociology focuses primarily on the analysis of modern industrial societies by examining their basic patterns of social organization, the various changes that occur within these patterns, and the impact of the patterns on individual thought and action. Students are prepared for employment in human service fields or for graduate study in sociology or related fields.

Students majoring in sociology may select one of three tracks: **General Sociology**, **Human Services**, and **Sociology of Disability Services**.

The **General Track** attempts to broadly educate those students who may wish to pursue graduate training in sociology and make sociology a career and profession. Because of its flexibility, it is also appropriate for students who want to pursue double majors that would include such fields as psychology or criminology. The General Track gives students the broadest possible training in sociology. Students graduating with majors in general sociology often find employment in business, industry, and government.

The **Human Services Track** seeks to help students understand the causes of many of the problems that plague modern societies, such as poverty, racial discrimination, substance abuse, and domestic violence. It is designed to provide students with the knowledge and skills necessary to become practitioners in various human services areas (e.g., juvenile delinquency, medical sociology, gerontology, and interpersonal dynamics and family sociology).

Students who complete **Sociology of Disability Services Track**, specialized major track, will be prepared for employment in the human services/social services as therapeutic staff support personnel or in a wide variety of career services such as mental health/intellectual and developmental disabilities (MH/IDD) programs, community based residential/employment/training programs, early intervention programs, residential treatment programs, aging programs, and other agency service providers for individuals with disabilities. Additionally, students in this track are encouraged to complement their studies by adding a second major in disability services or a minor in special education, offered by the Department of Communication Disorders, Special Education, and Disability Services to better prepare them in a multidisciplinary curriculum. Minors are also recommended in psychology or child development and family relations.

The department also prepares teachers for secondary school social studies with a concentration in sociology. The program leads to the bachelor of science in education degree. With its emphasis on patterns of social organization in modern industrialized societies, sociology provides a solid foundation for teaching social science at the secondary level. Minors in sociology are available in the following tracks: General Sociology, Human Services, and Sociology of Disability Services.

Bachelor of Arts

General Sociology Track, Sociology, BA

The **General Track** attempts to broadly educate those students who may wish to pursue graduate training in sociology and make sociology a career and profession. Because of its flexibility, it is also appropriate for students who want to pursue double majors that would include such fields as psychology or criminology. The General Track gives students the broadest possible training in sociology. Students graduating with majors in general sociology often find employment in business, industry, and government.

Liberal Studies: 46-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 217 - Probability and Statistics **Credits:** 3 recommended

Social Science:

SOC 151 - Principles of Sociology **Credits:** 3

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits:** 3

Liberal Studies Electives: 6

No courses with SOC prefix

College: 0-8

Foreign Language Intermediate Level (1)

Major: 33

Required Courses:

SOC 151 - Principles of Sociology **Credits:** 3 (2)

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits:** 3 (2)

SOC 320 - Sociological Theory **Credits:** 3

SOC 460 - Social Research Methods I **Credits:** 3

SOC 461 - Social Research Methods II **Credits:** 3

One Course from the Following:

SOC 361 - Social Stratification **Credits:** 3

SOC 362 - Racial and Ethnic Minorities **Credits: 3**
SOC 363 - Sociology of Gender **Credits: 3**

Substantive Areas: 12

At least one different course from four of the following substantive areas:

Social Inequality and Social Change:

SOC 269 - Sociology of Deviance **Credits: 3**
SOC 337 - Society, Globalization, and Risk **Credits: 3**
SOC 361 - Social Stratification **Credits: 3**
SOC 362 - Racial and Ethnic Minorities **Credits: 3**
SOC 363 - Sociology of Gender **Credits: 3**
SOC 387 - Social and Cultural Change **Credits: 3**
SOC 448 - Social Welfare Policy **Credits: 3**
SOC 452 - Disability and Society **Credits: 3**
SOC 458 - Political Sociology **Credits: 3**

Deviance and Social Problems:

SOC 231 - Contemporary Social Problems **Credits: 3**
SOC 269 - Sociology of Deviance **Credits: 3**
SOC 333 - Delinquency and Youth **Credits: 3**
SOC 335 - Alcohol and Drug Abuse **Credits: 3**
SOC 427 - Social Perspectives on Intimate Partner Violence **Credits: 3**
SOC 428 - Child Abuse **Credits: 3**
SOC 452 - Disability and Society **Credits: 3**

Individual in Society:

SOC 251 - Sociology of Human Sexuality **Credits: 3**
SOC 269 - Sociology of Deviance **Credits: 3**
SOC 345 - Interpersonal Dynamics **Credits: 3**
SOC 357 - Sociology of Aging and the Life-course **Credits: 3**
SOC 452 - Disability and Society **Credits: 3**

Social Organization and Institutions:

SOC 286
SOC 336 - Sociology of the Family **Credits: 3**
SOC 340
SOC 348 - Sociology of Work **Credits: 3**
SOC 352 - Sociology of Religion **Credits: 3**
SOC 421 - Sociology of Mass Media **Credits: 3**
SOC 442 - Medical Sociology **Credits: 3**
SOC 458 - Political Sociology **Credits: 3**

Comparative Sociology:

SOC 233
SOC 271
SOC 272
SOC 273

SOC 286
SOC 314 - Sociology of Native Americans **Credits:** 3
SOC 337 - Society, Globalization, and Risk **Credits:** 3
SOC 387 - Social and Cultural Change **Credits:** 3
SOC 442 - Medical Sociology **Credits:** 3

Free Sociology Electives: 9

(3)

Free Electives: 31-41

Total Degree Requirements: 120

(1) Intermediate-level foreign language may be included in Liberal Studies electives.

(2) Credits counted in Liberal Studies, not in the major.

(3) Internship in Sociology (SOC 493) will not count as part of the required free sociology electives and must count as credits beyond the 33cr required for the major (out of free electives). The student must write a one-page justification explaining the selection of his/her 9cr of free sociology electives as it relates to the internship experience.

Human Services Track, Sociology, BA

The **Human Services Track** in sociology seeks to help students understand the causes of many of the problems that plague modern societies, such as poverty, racial discrimination, substance abuse, and domestic violence. It is designed to provide students with the knowledge and skills necessary to become practitioners in various human services areas (e.g., juvenile delinquency, medical sociology, gerontology, and interpersonal dynamics and family sociology).

Liberal Studies: 46-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 217 - Probability and Statistics **Credits:** 3 recommended

Social Science:

Required

SOC 151 - Principles of Sociology **Credits:** 3

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits:** 3

Recommended

ANTH 110 - Contemporary Anthropology **Credits:** 3

PSYC 101 - General Psychology **Credits:** 3

Liberal Studies Electives: 6

No courses with SOC prefix

College: 0-8

Foreign Language Intermediate Level (1)

Major: 42

Required Courses:

SOC 151 - Principles of Sociology **Credits: 3 (2)**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3 (2)**

SOC 320 - Sociological Theory **Credits: 3**

SOC 391 - Foundations of Sociological Practice **Credits: 3**

SOC 392 - Clinical Sociological Practice **Credits: 3**

SOC 460 - Social Research Methods I **Credits: 3**

SOC 461 - Social Research Methods II **Credits: 3**

SOC 493 - Internship in Sociology **Credits: 3-12 (3)**

Controlled Electives: 15

One substantive area (4, 5)

Medical Sociology:

SOC 442 - Medical Sociology **Credits: 3**

Four Courses from the Following:

ANTH 222 - Biological Anthropology **Credits: 3**

ANTH 444 - Medical Anthropology **Credits: 3**

BIOL 240 - Human Physiology **Credits: 4**

or

BIOL 155 - Human Physiology and Anatomy **Credits: 4**

ECON 335 - Public Finance **Credits: 3**

FDNT 212 - Nutrition **Credits: 3**

PSYC 225 - Abnormal Psychology **Credits: 3**

PSYC 378 - Psychology of Death and Dying **Credits: 3**

SOC 231 - Contemporary Social Problems **Credits: 3**

SOC 336 - Sociology of the Family **Credits: 3**

SOC 357 - Sociology of Aging and the Life-course **Credits: 3**

SOC 387 - Social and Cultural Change **Credits: 3**

SOC 448 - Social Welfare Policy **Credits: 3**

SOC 452 - Disability and Society **Credits: 3**

Gerontology:

SOC 357 - Sociology of Aging and the Life-course **Credits: 3**

Four Courses from the Following:

ANTH 444 - Medical Anthropology **Credits: 3**
ECON 335 - Public Finance **Credits: 3**
PSYC 312 - Adult Development and Aging **Credits: 3**
PSYC 378 - Psychology of Death and Dying **Credits: 3**
SOC 231 - Contemporary Social Problems **Credits: 3**
SOC 251 - Sociology of Human Sexuality **Credits: 3**
SOC 336 - Sociology of the Family **Credits: 3**
SOC 352 - Sociology of Religion **Credits: 3**
SOC 387 - Social and Cultural Change **Credits: 3**
SOC 442 - Medical Sociology **Credits: 3**
SOC 448 - Social Welfare Policy **Credits: 3**

Juvenile Delinquency:

SOC 333 - Delinquency and Youth **Credits: 3**

Four Courses from the Following:

CRIM 102 - Survey of Criminology **Credits: 3**
CRIM 225 - Survey of Corrections **Credits: 3**
CRIM 235 - Survey of Juvenile Justice and Juvenile Law **Credits: 3**
CRIM 394 - Crime and Delinquency Prevention **Credits: 3**
GEOG 230 - Cultural Geography **Credits: 3**
GEOG 231 - Economic Geography **Credits: 3**
HIST 374 - History of Organized Crime **Credits: 3**
SOC 231 - Contemporary Social Problems **Credits: 3**
SOC 269 - Sociology of Deviance **Credits: 3**
SOC 335 - Alcohol and Drug Abuse **Credits: 3**
SOC 336 - Sociology of the Family **Credits: 3**
SOC 345 - Interpersonal Dynamics **Credits: 3**
SOC 361 - Social Stratification **Credits: 3**
SOC 362 - Racial and Ethnic Minorities **Credits: 3**
SOC 387 - Social and Cultural Change **Credits: 3**
SOC 428 - Child Abuse **Credits: 3**
SOC 448 - Social Welfare Policy **Credits: 3**

Interpersonal and Family Sociology:

SOC 336 - Sociology of the Family **Credits: 3**
or
SOC 345 - Interpersonal Dynamics **Credits: 3**

Four Courses from the Following:

CDFR 218 - Child Development **Credits: 3**
CDFR 224 - Marriage and Family Relations **Credits: 3**
PSYC 311 - Child Psychology **Credits: 3**
PSYC 225 - Abnormal Psychology **Credits: 3**
PSYC 235 - Social Psychology **Credits: 3**
SOC 251 - Sociology of Human Sexuality **Credits: 3**
SOC 269 - Sociology of Deviance **Credits: 3**
SOC 333 - Delinquency and Youth **Credits: 3**
SOC 335 - Alcohol and Drug Abuse **Credits: 3**
SOC 336 - Sociology of the Family **Credits: 3**
SOC 345 - Interpersonal Dynamics **Credits: 3**
SOC 361 - Social Stratification **Credits: 3**

SOC 362 - Racial and Ethnic Minorities **Credits: 3**
SOC 363 - Sociology of Gender **Credits: 3**
SOC 387 - Social and Cultural Change **Credits: 3**
SOC 427 - Social Perspectives on Intimate Partner Violence **Credits: 3**
SOC 428 - Child Abuse **Credits: 3**
SOC 448 - Social Welfare Policy **Credits: 3**
SOC 452 - Disability and Society **Credits: 3**

Labor and Industry:

SOC 340
or
SOC 348 - Sociology of Work **Credits: 3**

Four Courses from the Following:

ECON 330 - Labor Economics **Credits: 3**
ELR 480 - Introduction to Negotiations and Conflict Resolution **Credits: 3**
PSYC 390 - Industrial-Organizational Psychology **Credits: 3**
RGPL 350 - Introduction to Community Planning **Credits: 3**
SOC 231 - Contemporary Social Problems **Credits: 3**
SOC 340
SOC 348 - Sociology of Work **Credits: 3**
SOC 361 - Social Stratification **Credits: 3**
SOC 387 - Social and Cultural Change **Credits: 3**
SOC 448 - Social Welfare Policy **Credits: 3**
SOC 458 - Political Sociology **Credits: 3**

Community Development:

SOC 231 - Contemporary Social Problems **Credits: 3**
or
SOC 448 - Social Welfare Policy **Credits: 3**

Four Courses from the Following:

ANTH 271 - Cultural Area Studies: Africa **Credits: 3**
or
SOC 271
ANTH 272 - Culture Area: China **Credits: 3**
or
SOC 272
ANTH 314 - Contemporary Native American Cultures **Credits: 3**
or
SOC 314 - Sociology of Native Americans **Credits: 3**
FDNT 402 - Community Nutrition **Credits: 3**
GEOG 331 - Population Geography **Credits: 3**
GEOG 232 - Urban Landscapes **Credits: 3**
PLSC 251 - State and Local Political Systems **Credits: 3**
RGPL 350 - Introduction to Community Planning **Credits: 3**
SOC 231 - Contemporary Social Problems **Credits: 3**
SOC 269 - Sociology of Deviance **Credits: 3**
SOC 333 - Delinquency and Youth **Credits: 3**

- SOC 336 - Sociology of the Family **Credits:** 3
- SOC 363 - Sociology of Gender **Credits:** 3
- SOC 387 - Social and Cultural Change **Credits:** 3
- SOC 448 - Social Welfare Policy **Credits:** 3

Free Electives: 22-32

Total Degree Requirements: 120

- (1) Intermediate-level foreign language may be included in Liberal Studies electives.
- (2) Credits counted in Liberal Studies, not in the major.
- (3) SOC 391 and SOC 392 must be taken before SOC 493. Generally, SOC 493 is taken in the summer before or after the senior year.
- (4) Students may create their own substantive area with the approval of the department Chair.
- (5) At least four courses in any substantive area must be SOC/SOWK courses.

Bachelor of Science in Education

Sociology Track, Social Science Education, BSED

The department also prepares teachers for secondary school social studies with a concentration in sociology. The program leads to the bachelor of science in education degree. With its emphasis on patterns of social organization in modern industrialized societies, sociology provides a solid foundation for teaching social science at the secondary level. Minors in sociology are available in the following tracks: General Sociology, Human Services, and Sociology of Disability Services.

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog. To student teach, students must have a 3.0 cumulative GPA in the major (social science and history courses). To be licensed to teach education/sociology, majors must apply for social studies education certification.

Liberal Studies: 43-45

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities:

History is fulfilled by courses in the major

Mathematics:

MATH 217 - Probability and Statistics **Credits:** 3 (recommended)

Natural Science:

BIOL 103 - Life on Earth **Credits:** 4 (recommended)

BIOL 104 - Human Biology: How the Human Body Works **Credits:** 4 (recommended)

Social Science:

ECON 121 - Principles of Macroeconomics **Credits: 3**

PSYC 101 - General Psychology **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

Liberal Studies Electives: 6

PSYC 215 - Developmental Psychology **Credits: 3**

or

PSYC 235 - Social Psychology **Credits: 3**

No courses with SOC prefix

College: 35

3 additional credits of MATH 100-level or above (in addition to Liberal Studies Mathematics) (1)

Preprofessional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits: 3**

EDSP 102 - Educational Psychology **Credits: 3**

Professional Education Sequence:

CHSS 342 - Social Studies Teaching Lab **Credits: 1**

EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits: 2**

EDEX 323 - Instruction of English Language Learners with Special Needs **Credits: 2**

EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**

EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**

EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**

EDUC 441 - Student Teaching **Credits: 5-12**

EDUC 442 - School Law **Credits: 1**

EDUC 455 - Teaching of Social Studies in Secondary Schools **Credits: 3**

Major: 21

(2)

Required Sociology Courses:

SOC 231 - Contemporary Social Problems **Credits: 3**

SOC 320 - Sociological Theory **Credits: 3**

SOC 336 - Sociology of the Family **Credits: 3**

SOC 460 - Social Research Methods I **Credits: 3**

Controlled Electives: 3

Social Equity

One course on social equity from the following:

SOC 361 - Social Stratification **Credits: 3**

SOC 362 - Racial and Ethnic Minorities **Credits: 3**

SOC 363 - Sociology of Gender **Credits: 3**

Two Additional Courses: 6

One each from any two of the following three categories:

Deviance and Social Problems:

- SOC 269 - Sociology of Deviance **Credits: 3**
- SOC 333 - Delinquency and Youth **Credits: 3**
- SOC 335 - Alcohol and Drug Abuse **Credits: 3**
- SOC 357 - Sociology of Aging and the Life-course **Credits: 3**
- SOC 427 - Social Perspectives on Intimate Partner Violence **Credits: 3**
- SOC 428 - Child Abuse **Credits: 3**
- SOC 452 - Disability and Society **Credits: 3**

Individual in Society:

- SOC 251 - Sociology of Human Sexuality **Credits: 3**
- SOC 345 - Interpersonal Dynamics **Credits: 3**

Social Organizations and Institutions:

- SOC 286
- SOC 337 - Society, Globalization, and Risk **Credits: 3**
- SOC 340
- SOC 348 - Sociology of Work **Credits: 3**
- SOC 352 - Sociology of Religion **Credits: 3**
- SOC 361 - Social Stratification **Credits: 3**
- SOC 362 - Racial and Ethnic Minorities **Credits: 3**
- SOC 363 - Sociology of Gender **Credits: 3**
- SOC 387 - Social and Cultural Change **Credits: 3**
- SOC 421 - Sociology of Mass Media **Credits: 3**
- SOC 442 - Medical Sociology **Credits: 3**
- SOC 448 - Social Welfare Policy **Credits: 3**
- SOC 458 - Political Sociology **Credits: 3**

History Distribution Requirements: 9

- HIST 202 - Western Civilization since 1600 **Credits: 3**
- HIST 204 - United States History to 1877 **Credits: 3**
- HIST 205 - United States History since 1877 **Credits: 3**

Social Science Distribution Requirements: 9

- ANTH 211 - Cultural Anthropology **Credits: 3**
- GEOG 230 - Cultural Geography **Credits: 3**
- PLSC 280 - Comparative Government I: Western Political Systems **Credits: 3**
- or
- PLSC 285 - Comparative Government II: Non-Western Political Systems **Credits: 3**

Free Electives: 1-3

Total Degree Requirements: 120

(1) Students are required to take an additional 3cr of MATH beyond the Liberal Studies requirements for a total of 6cr, all of which must be 100 level or above.

(2) Courses counted toward Liberal Studies credits do not receive duplicate credits in the major.

Minor

General Sociology, Sociology Minor

Required Courses:

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

SOC 320 - Sociological Theory **Credits: 3**

Controlled Electives:

One Course from the Following:

SOC 361 - Social Stratification **Credits: 3**

SOC 362 - Racial and Ethnic Minorities **Credits: 3**

SOC 363 - Sociology of Gender **Credits: 3**

Additional Courses: 9

Three additional courses in SOC/SOWK, at least one of which must be 300 level or above

Total Minor Requirements: 18

Human Services, Sociology Minor

Required Course:

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

SOC 391 - Foundations of Sociological Practice **Credits: 3**

SOC 392 - Clinical Sociological Practice **Credits: 3**

Controlled Electives:

One Course from the Following:

SOC 320 - Sociological Theory **Credits: 3**

SOC 361 - Social Stratification **Credits: 3**

Additional Courses

Two additional courses in SOC/SOWK, at least one of which must be 300 level or above

Total Minor Requirements: 18

Sociology of Disability Services Minor

Required Courses:

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

SOC 391 - Foundations of Sociological Practice **Credits: 3**

SOC 392 - Clinical Sociological Practice **Credits: 3**

SOC 442 - Medical Sociology **Credits: 3**

SOC 452 - Disability and Society **Credits: 3**

Controlled Electives:

One course from the following:

SOC 336 - Sociology of the Family **Credits: 3**

SOC 357 - Sociology of Aging and the Life-course **Credits: 3**

Total Minor Requirements: 18

Certificate and Certification Programs

Sociology for Human Services Certificate

The certificate in Sociology for Human Services seeks to provide students with sociological knowledge and skills that will help them pursue further education and careers in the field of human services. Human service practitioners rely on a broad base of knowledge and skills as they interact with diverse populations to prevent and remediate problems. This certificate provides the student with flexibility in selecting courses that best fit with the student's areas of interest and future goals while also providing core courses designed to familiarize students with the sociology of human services and enhance skills and preparation for work in these fields. The certificate in Sociology for Human Services is open to students in any major.

Core Courses: 6

SOC 391 - Foundations of Sociological Practice **Credits: 3**

SOC 392 - Clinical Sociological Practice **Credits: 3**

Social Stratification Elective: 3

One course from the following:

SOC 361 - Social Stratification **Credits: 3**

SOC 362 - Racial and Ethnic Minorities **Credits: 3**

SOC 363 - Sociology of Gender **Credits: 3**

SOC 452 - Disability and Society **Credits: 3**

Controlled Electives: 3

One course from the following:

- SOC 251 - Sociology of Human Sexuality **Credits: 3**
- SOC 333 - Delinquency and Youth **Credits: 3**
- SOC 357 - Sociology of Aging and the Life-course **Credits: 3**
- SOC 427 - Social Perspectives on Intimate Partner Violence **Credits: 3**
- SOC 428 - Child Abuse **Credits: 3**
- SOC 448 - Social Welfare Policy **Credits: 3**

Other Degrees

Sociology Honors Program

The honors program is open by departmental permission to declared sociology majors with a minimum 3.25 cumulative GPA and a 3.5 declared GPA in sociology courses. Students who are considering attending graduate school are encouraged to apply to the honors program. Students complete two 500, 600, or 700 Sociology (SOC) master's-level courses and 6 credits of SOC 483. Students may not repeat 500 dual-level courses if the student has already taken the course at the 400-level. Students must meet graduate school requirements before enrolling in graduate-level courses. Students should be aware that, in accordance with university policy, graduate-level courses taken for the Honors Track cannot later be applied toward an IUP graduate program. SOC 320 is a prerequisite for enrollment in graduate classes and thesis credits. Pending approval, a student may substitute up to two honors courses for one or two of the graduate-level courses. Students must earn at least a grade of "B" in each course completed for the track and must maintain a 3.25 cumulative GPA. To determine how Honors Track courses will be integrated into existing requirements for the sociology major, students should consult their advisors.

Students may be invited to apply or may nominate themselves. In either case, to be considered for the Sociology Honors Track, students must have earned 15 credits in sociology. Sociology majors who have met the eligibility requirements must submit an application to the chairperson of the Department of Sociology after they have earned at least 60 credits, but prior to their senior year. Students are encouraged to apply for the honors program in the last semester of their sophomore or first semester of their junior year.

Prerequisites:

Declared major in sociology and completion of 60cr, SOC 320, and 12 additional credits in SOC

Required Courses:

- CHSS 489 - Honors Colloquium **Credits: 3** (Honors)
- HNRC 499 - Honors Senior Synthesis **Credits: 3-6** (1)
- SOC 483 - Honors Thesis **Credits: 1-6** (Honors)

Total Honors Requirements: 12

(1) Credits for HNRC 499 are counted in the Liberal Studies synthesis requirement.

Other Programs

Bachelor of Arts

Asian Studies, BA

Alan T. Baumler, Coordinator

The Committee of Asian Studies offers an interdisciplinary major and a minor to provide students with the opportunity to increase their knowledge of the world's largest, most populous, and most diverse continent. Students enrolled in the Asian studies major or minor will find that the course offerings furnish excellent preparation for careers in business, government, journalism and public relations, and teaching.

To complete the Asian studies major, a student must take a minimum of 33 credits in courses dealing with Asia. All Asian studies majors must take ASIA 200 and must demonstrate at least an intermediate-level proficiency in an Asian language, doing so either by passing the intermediate sequence of one of the Asian languages offered at IUP or by demonstrating that they have acquired the equivalent proficiency level elsewhere. The remaining courses should come from "Category A: Exclusively Asia-Focused." Students may, but do not have to, apply up to three credits from "Category B: Substantially Asia-Focused" to their degree. It is highly recommended that students complement their Asian studies degree with a minor or second major, preferably in such fields as anthropology, economics, fine arts, geography, history, international business, international studies, journalism and public relations, political science, or religious studies.

Liberal Studies: 43-44

As outlined in Liberal Studies Requirements with the following specifications:

Mathematics: 3

Liberal Studies Elective: 3

No courses with CHIN or JAPN prefixes

Major: 33-34

Required Course: 3

ASIA 200 - Introduction to Asian Studies **Credits: 3**

Controlled Electives: 30cr

(1)

Intermediate Asian language: 0-4cr

(2)

CHIN 201 - Intermediate Chinese **Credits: 4**

CRLG 251 - Arabic IV **Credits: 3**

CRLG 255 - Hindi IV **Credits: 3**

JAPN 201 - Intermediate Japanese **Credits: 4**

KORE 201 - Intermediate Korean **Credits: 4**

Category A: Exclusively Asia-Focused: 24-30cr

(3, 4)

At least 24cr earned through the following courses:

ANTH 272 - Culture Area: China **Credits: 3**

ANTH 333 - The Archaeology of Early China **Credits: 3**

ARHI 224 - Introduction to Asian Art **Credits: 3**

ARHI 423 - Art of Japan **Credits: 3**
 ARHI 424 - Art of India and Southeast Asia **Credits: 3**
 ARHI 425 - Arts of China **Credits: 3**
 ARHI 427 - Japanese Narrative Art **Credits: 3**
 GEOG 257 - Geography of South and Southwest Asia **Credits: 3**
 HIST 106 - Samurai and Gongfu Heroes: Masculinity in East Asia **Credits: 3**
 or
 ASIA 106 - Samurai and Gongfu Heroes: Masculinity in East Asia **Credits: 3**
 HIST 206 - The History of East Asia **Credits: 3**
 HIST 331 - Modern Middle East **Credits: 3**
 HIST 332 - History of Early China **Credits: 3**
 HIST 338 - The History of Iran **Credits: 3**
 HIST 339 - Jihad and the Origins of Islamist Movements in the Middle East **Credits: 3**
 or
 PLSC 339 - Jihad and the Origins of Islamist Movements in the Middle East **Credits: 3**
 HIST 433 - China 1300-1800: The Late Imperial Age **Credits: 3**
 HIST 434 - Modern China 1800-present **Credits: 3**
 HIST 436 - Japan 1500-1850: Early Modern Japan **Credits: 3**
 HIST 437 - Modern Japan 1850-Present **Credits: 3**
 PLSC 383 - Political Systems: Asia **Credits: 3**
 PLSC 384 - Political Systems: Middle East **Credits: 3**
 RLST 311 - Eastern Philosophy **Credits: 3**
 RLST 370 - Religions: China and Japan **Credits: 3**
 RLST 374 - Buddhism **Credits: 3**
 RLST 375 - Religions of India **Credits: 3**
 RLST 378 - Hinduism **Credits: 3**
 RLST 380 - Islam **Credits: 3**
 RLST 402 - Topics in Asian Religions **Credits: 3**

Category B: Substantially Asia-Focused 0-3cr

(3, 4, 5)

ARHI 321 - History of World Ceramics **Credits: 3**
 BCOM 342 - Intercultural Business Communication **Credits: 3**
 ECON 339 - Economic Development I **Credits: 3**

 GEOG 104 - World Geography: Global Context **Credits: 3**
 GEOG 254 - Geography of Russia, Central Eurasia, and Eastern Europe **Credits: 3**
 MGMT 459 - Seminar in International Management **Credits: 3**
 PLSC 101 - World Politics **Credits: 3**
 PLSC 285 - Comparative Government II: Non-Western Political Systems **Credits: 3**
 RLST 110 - World Religions **Credits: 3**

Free Electives: 42-44

Total Degree Requirements: 120

(1) At least 12cr must be at the 300 level or higher.

(2) A student who has acquired an intermediate level of proficiency in an Asian language, but not through an accredited college program, may apply to the Asian Studies Committee to be exempt from 3cr in intermediate language instruction. Such credits in these cases are to be replaced by taking one additional Category A class. Students who take advanced-level Asian language courses at IUP or another university may apply to the program director to have such credits partially fulfill the Category A requirements.

(3) Unless given special permission by the Asian Studies Committee, no more than 9cr of courses with the same departmental prefix may count toward the major.

(4) The subject matter varies in rotating topic courses (e.g., HIST 497, RLST 485 etc.); and special topics courses (i.e. classes numbered 281 and 481). When concerned with Asian Studies, these courses may be applied to either Category A or Category B with the approval of the Asian Studies Committee.

(5) Certain courses may require additional prerequisites

For further information on the Asian Studies programs, contact the College of Humanities and Social Sciences, 201 McElhaney Hall, 724-357-2280.

Minor

Asian Studies Minor

Alan T. Baumler, Coordinator

(1, 2, 3)

The Committee of Asian Studies offers an interdisciplinary major and a minor to provide students with the opportunity to increase their knowledge of the world's largest, most populous, and most diverse continent. Students enrolled in the Asian studies major or minor will find that the course offerings furnish excellent preparation for careers in business, government, journalism and public relations, and teaching.

To minor in Asian studies, students must complete a minimum of 18 credits, no more than 6 of which may have the prefix of their major. ASIA 200 is required of all Asian studies minors. At least 12 credits must come from Category A (Exclusively Asia-Focused); 3 credits of an Asian language course may apply to the Category A requirement. No more than 3 credits from Category B (Substantially Asia-Focused) may be applied to the minor.

Required Course: 3

ASIA 200 - Introduction to Asian Studies **Credits: 3**

Electives 15

The remaining 15 credits should come from the list of Category A, exclusively Asia-focused classes from the major. Students may, but do not have to, apply up to 3cr of an Asian Language class and/or 3cr of a Category B class.

Total Minor Requirements: 18

(1) The subject matter varies in rotating topic courses (e.g., HIST 497, RLST 485 etc.); and special topics courses (i.e. classes numbered 281 and 481). When concerned with Asian Studies, these courses may be applied to either Category A or Category B with the approval of the Asian Studies Committee.

(2) With the program coordinator's approval, 3cr of an internship (493) may be counted toward the Asian Studies minor.

(3) Courses need to be in at least two different prefixes.

For further information on the Asian Studies programs, contact the College of Humanities and Social Sciences, 201 McElhaney Hall, 724-357-2280.

Lesbian, Gay, Bisexual, Transgender, and Queer (LGBT&Q) Studies Minor

The Lesbian, Gay, Bisexual, Transgender, and Queer (LGBT&Q) Studies minor provides students the opportunity to critically analyze influences on and of sexualities, sexual and gender identity formation, and experiences in various social contexts, with a focus on sexual minorities and on preparing students to live and work in a pluralistic society. This interdisciplinary minor includes courses from a variety of disciplines, including sociology, anthropology, psychology, English, health education, child development and family relations. Students will examine diversity in sexual and gender identities, and the intersections of sexualities and gender with other identities including race, religion, and social class. Students also explore institutional influences, including family, politics, labor force and economics, religion, education, health care, media, arts, and sciences and

the local, national, and global discourse on sexualities and gender identities. The curriculum additionally includes critical examination of the formation and effects of public policies on individuals and communities of differing sexual and gender identities, analysis of representations, and the discourses on sexualities as expressed through language, literature, and the arts, as well as the policies and practices of social institutions such as health care, religion, politics, education, and sports, among others.

Required Course: 3

LGBT 200 - Introduction to Lesbian, Gay, Bisexual, Transgender, and Queer Studies **Credits: 3**

Controlled Electives: 15

Five courses from the following, two of which must be 300 level or higher: (1)

- ANTH 350 - Anthropology of Gender **Credits: 3**
- ANTH 352 - The Anthropology of Human Rights **Credits: 3**
- CDFR 224 - Marriage and Family Relations **Credits: 3**
- CDFR 323 - Family Issues **Credits: 3**
- ENGL 350 - Gender and Sexual Orientation in Literature, Theory, and Film **Credits: 3**
- KHSS 450 - Curriculum and Programming in Sexuality Education **Credits: 3**
- LGBT 400 - Queer Theory **Credits: 3**
- PLSC 405 - Sexuality and Law **Credits: 3**
- PSYC 379 - Psychology of Human Sexuality **Credits: 3**
- SOC 251 - Sociology of Human Sexuality **Credits: 3**

Total Minor Requirements: 18

(1) Other relevant courses may serve as an elective with permission of the LGBT&Q Studies coordinator.

For further information on this minor, contact the College of Humanities and Social Sciences, 201 McElhane Hall, 724-357-2280.

Pan-African Studies Minor

The Pan-African Studies minor is a multidisciplinary program that brings together courses focusing on the vitality and accomplishments of pre-colonial African societies, the cultural and racial heritages of people of African descent in relationship to western societies, and aspects of modern-day African cultures. The cluster of courses included in this program represents a broad, diverse look at the diaspora of people of African origin. The minor helps students to enrich their cross-cultural studies; to heighten their awareness of and sensitivity to cultural diversity; and to expand their knowledge of world contributions of people of African heritage. A Pan-African Studies minor is thus valuable in an increasingly diverse society and attractive to employers and graduate schools alike.

Students must complete 18 credits to earn a minor in Pan-African studies. In addition to the one required course PNAF 131, at least three courses (9 credits) must come from Category A: Exclusively Pan-African-Focused courses. The remaining courses may come from either Category A or Category B: Substantially Pan-African-Focused courses. Because their content may vary, courses from Category B must be approved by the coordinator of Pan-African Studies to count for the minor. In addition, special topics, independent study, study abroad, and internship courses may be applied to either category with the approval of the program coordinator.

No more than 6cr taken for the minor may also count for the student's major.

Required Course: 3

PNAF 131 - Introduction to Pan-African Studies **Credits: 3**

Category A: Exclusively Pan-African Focused: 9-15

ANTH 271 - Cultural Area Studies: Africa **Credits: 3**

or

SOC 271 - Cultural Area Studies: Africa **Credits: 3**
COMM 380 - The History of African Americans in Film **Credits: 3**
ECON 338 - Poverty in Africa **Credits: 3**
ENGL 348 - African American Literature **Credits: 3**
GEOG 255 - Geography of Africa **Credits: 3**
HIST 355 - African History I: Antiquity to 1600 **Credits: 3**
HIST 356 - African History II: 1600 to Present **Credits: 3**
HIST 365 - History of Black America since Emancipation **Credits: 3**
HIST 366 - African American Women **Credits: 3**
PLSC 382 - Political Systems: Africa **Credits: 3**
PNAF 281 - Special Topics in Pan-African Studies **Credits: 3**
PNAF 481 - Special Topics in Pan-African Studies **Credits: 3**
PNAF 482 - Independent Study **Credits: 1-3**
RLST 360 - African Religions **Credits: 3**

Category B: Substantially Pan-African Focused: 0-6

(1)

ECON 339 - Economic Development I **Credits: 3**
ENGL 398 - Global Genres **Credits: 3**
JRNL 375 - World News Coverage **Credits: 3**
PLSC 389 - International Development Strategies **Credits: 3**
RLST 380 - Islam **Credits: 3**
SOC 362 - Racial and Ethnic Minorities **Credits: 3**

Total Minor Requirements: 18

(1) Because their content may vary, courses from Category B must be approved by the Pan-African Studies coordinator in order to count for the minor.

For further information on this minor, contact the College of Humanities and Social Sciences, 201 McElhaney Hall, 724-357-2280.

Women's and Gender Studies Minor

Website: www.iup.edu/womens

Lynn Botelho, Director

The Women's and Gender Studies minor is designed to increase students' interdisciplinary knowledge about the gendered nature of women's experiences and the ways that all genders are shaped by history, culture, and society. In order to achieve this goal, the program offers courses using a variety of theories and methodologies from a range of disciplines, such as anthropology, art, communication media, criminology, film, the fine arts, history, journalism and public relations, literature, philosophy, political science, psychology, religious studies, and sociology. The program explores gendered hierarchies and the impact of gender on the experiences of women, as well as women- and gendered-centered knowledge productions and learning. Students are encouraged to challenge traditional theories and research regarding women and gender through innovative and experimental classroom experiences and writing assignments. Students analyze the world, imagine and re-envision it, and seek to enact social transformation in both theory and practice.

A minor in women's and gender studies strengthens and supplements every academic major and later professional careers. Students' awareness of gendered, sexualized, classed, and racialized hierarchies make them valuable professionals in a range of careers, from business and banking to social work and law.

Required Course: 3

WGS 200 - Introduction to Women's and Gender Studies **Credits: 3**

Other Requirements:

Students receive approval for a specified course of study from the following list of courses: (1, 2, 3)

ANTH 350 - Anthropology of Gender **Credits:** 3

ASIA 106 - Samurai and Gongfu Heroes: Masculinity in East Asia **Credits:** 3

or

HIST 106 - Samurai and Gongfu Heroes: Masculinity in East Asia **Credits:** 3

COMM 325 - Gender in Media **Credits:** 3

CRIM 450 - Women and Crime **Credits:** 3

ENGL 225 - Introduction to Literature by Women **Credits:** 3

ENGL 336 - Language, Gender, and Society **Credits:** 3

ENGL 350 - Gender and Sexual Orientation in Literature, Theory, and Film **Credits:** 3

HIST 369 - Women in America **Credits:** 3

HIST 390 - History of Women—World Cultures **Credits:** 3

JRNL 250 - Women and the Press **Credits:** 3

PLSC 404 - Women and Politics **Credits:** 3

PSYC 379 - Psychology of Human Sexuality **Credits:** 3

PSYC 380 - Gender and Violence **Credits:** 3

PSYC 411 - Psychology of Women **Credits:** 3

RLST 245 - Women and Religion **Credits:** 3

RLST 345 - Women in the Bible **Credits:** 3

RLST 485 - Selected Topics in Feminist Studies of Religion **Credits:** 3

SOC 251 - Sociology of Human Sexuality **Credits:** 3

SOC 363 - Sociology of Gender **Credits:** 3

SOC 410 - Men and Masculinities **Credits:** 3

SOC 427 - Social Perspectives on Intimate Partner Violence **Credits:** 3

WGS 301 - Asian American and Asian Diasporic Women's Literature **Credits:** 3

WGS 400 - Feminist Theories **Credits:** 3

WGS 482 - Independent Study **Credits:** 1-3

XXXX 281 - Special Topics (offered within department) **Credits:** var-1-3 (4)

XXXX 481 - Special Topics (offered within department) **Credits:** var-1-3 (4)

XXXX 493 - Internship **Credits:** var-1-3 (5)

Total Minor Requirements: 18

(1) Students receive approval for a specified course of study from the above list of courses and, with permission from the director of Women's and Gender Studies, from selected WGS courses that have been recently developed.

(2) No more than two courses that for a student's major can also count for the Women's and Gender Studies minor.

(3) At least 6cr of coursework must be at 300 level or above.

Certificate and Certification Programs

China Studies Certificate

(1, 2, 3, 4)

The China Studies Certificate is a 15-credit program that allows students to pursue studies that focus on one or more disciplinary areas focused on China. Students who wish to pursue graduate-level studies and/or a career in a China-related field may want to add this credential to their main academic preparation. Others who have an interest in Chinese society and culture can also benefit from this certificate.

Core Courses: Primarily China-Focused Courses: 12-15

(2)

ANTH 272 - Culture Area: China **Credits:** 3
ANTH 333 - The Archaeology of Early China **Credits:** 3
ARHI 425 - Arts of China **Credits:** 3
CHIN - Chinese Language Courses **Credits:** 4 (5)
HIST 332 - History of Early China **Credits:** 3
HIST 433 - China 1300-1800: The Late Imperial Age **Credits:** 3
HIST 434 - Modern China 1800-present **Credits:** 3

Electives: East Asia-Focused Courses: 0-3

HIST 106 - Samurai and Gongfu Heroes: Masculinity in East Asia **Credits:** 3
or
ASIA 106 - Samurai and Gongfu Heroes: Masculinity in East Asia **Credits:** 3
HIST 206 - The History of East Asia **Credits:** 3
PLSC 383 - Political Systems: Asia **Credits:** 3
RLST 311 - Eastern Philosophy **Credits:** 3
RLST 370 - Religions: China and Japan **Credits:** 3
RLST 374 - Buddhism **Credits:** 3

Total Certificate Requirements: 15

- (1) Courses need to be in at least two different prefixes.
- (2) The subject matter varies in rotating topic courses (e.g., HIST 497, RLST 485 etc.); and special topics courses (i.e. classes numbered 281 and 481). When concerned with Asian Studies, these courses may be applied to either the China-focused or East Asia-focused categories with the approval of the Asian Studies Coordinator.
- (3) Three credits of an appropriate internship can count towards the certificate with the approval of the Asian Studies Coordinator.
- (4) No more than 6 transfer credits may be counted towards the certificate.
- (5) No more than 3cr from an appropriate language class may be counted toward the certificate.

Japan Studies Certificate

(1, 2, 3, 4)

The Japan Studies Certificate is a 15-credit program that allows students to pursue studies that focus on one or more disciplinary areas focused on Japan. Students who wish to pursue graduate-level studies and/or a career in a Japan-related field may want to add this credential to their main academic preparation. Others who have an interest in Japanese society and culture can also benefit from this certificate.

Core Courses: Primarily Japan-Focused Courses: 12-15

(2)

ARHI 423 - Art of Japan **Credits:** 3
ARHI 427 - Japanese Narrative Art **Credits:** 3
HIST 436 - Japan 1500-1850: Early Modern Japan **Credits:** 3
HIST 437 - Modern Japan 1850-Present **Credits:** 3
JAPN - Japanese Language Courses **Credits:** 4 (5)
RLST 374 - Buddhism **Credits:** 3

Electives: East Asia-Focused Courses: 0-3

HIST 106 - Samurai and Gongfu Heroes: Masculinity in East Asia **Credits: 3**

or

ASIA 106 - Samurai and Gongfu Heroes: Masculinity in East Asia **Credits: 3**

HIST 206 - The History of East Asia **Credits: 3**

PLSC 383 - Political Systems: Asia **Credits: 3**

RLST 311 - Eastern Philosophy **Credits: 3**

RLST 370 - Religions: China and Japan **Credits: 3**

Total Certificate Requirements: 15

- (1) Courses need to be in at least two different prefixes.
- (2) The subject matter varies in rotating topic courses (e.g., HIST 497, RLST 485 etc.); and special topics courses (i.e. classes numbered 281 and 481). When concerned with Asian Studies, these courses may be applied to either the Japan-focused or East Asia-focused categories with the approval of the Asian Studies Coordinator.
- (3) Three credits of an appropriate internship can count towards the certificate with the approval of the Asian Studies Coordinator.
- (4) No more than 6 transfer credits may be counted towards the certificate.
- (5) No more than 3cr from an appropriate language class may be counted toward the certificate.

Middle Eastern Studies Certificate

(1, 2, 3, 4)

The Middle Eastern Studies Certificate is a 15-credit program that allows students to pursue studies that focus on one or more disciplinary areas focused on the Middle East. Students who wish to pursue graduate-level studies and/or a career in a Middle Eastern-related field may want to add this credential to their main academic preparation. Others who have an interest in Middle Eastern society and culture can also benefit from this certificate.

Required Courses: 15

- (2)
 - HIST 207 - The History of the Middle East **Credits: 3**
 - HIST 331 - Modern Middle East **Credits: 3**
 - HIST 338 - The History of Iran **Credits: 3**
 - HIST 339 - Jihad and the Origins of Islamist Movements in the Middle East **Credits: 3**or
 - PLSC 339 - Jihad and the Origins of Islamist Movements in the Middle East **Credits: 3**
 - PLSC 384 - Political Systems: Middle East **Credits: 3**
 - RLST 380 - Islam **Credits: 3**

Total Certificate Requirements: 15

- (1) Courses need to be in at least two different prefixes.
- (2) The subject matter varies in rotating topic courses (e.g., HIST 497, RLST 485 etc.); and special topics courses (i.e. classes numbered 281 and 481). When concerned with the Middle East, these courses can count towards the certificate with the approval of the Asian Studies Coordinator.
- (3) Three credits of an appropriate internship can count towards the certificate with the approval of the Asian Studies Coordinator.
- (4) No more than 6 transfer credits may be counted towards the certificate.
- (5) No more than 3cr from an appropriate language class may be counted towards the certificate.

Other Degrees

Asian Studies Honors Program

The honors program is open by permission of the Asian Studies Committee to Asian Studies majors with a minimum 3.25 cumulative GPA and a 3.5 GPA in Asian Studies courses. Students complete 36 credits in Asian Studies (instead of the normal 33) including two semesters of honors thesis research and writing. Honors theses are completed individually under the direction of a professor who specializes in the student's area of interest and are approved by a thesis committee comprising the coordinator and two other readers, one of whom may come from outside the program.

Students interested in the Asian Studies honors program should discuss this opportunity as early as possible with their advisors. Students may file a declaration of intent during the sophomore year; a formal application for admission must be made, normally early in the junior year. The program is particularly encouraged for students intending to seek admission to graduate or professional schools. Honors course work is designated on university transcripts; students completing the honors program are recognized at commencement ceremonies.

Required Courses:

Three additional credits in Asian Studies **Credits:** 3

ASIA 483 - Honors Thesis **Credits:** 3 (1)

Total Honors Requirements: 9

(1) Two semesters, 3cr each.

The Kopchick College of Natural Sciences and Mathematics

Deanne L. Snavely, Dean

Karen Pizarchik, Assistant Dean

Daniel A. Burkett, Dean's Associate for Academic Affairs

Website: www.iup.edu/natsciandmath

We change lives through science and math. Our graduates change the world as educators, scientists, and leaders.

We change lives through:

opportunities to explore, create, and innovate,
team-based problem-solving in teaching and learning,
interdisciplinary scientific research, and
challenges that inspire individual achievement.

These four mission objectives encompass the Kopchick College of Natural Sciences and Mathematics' (KCNSM) approach for education of its students now and in the future. New scientific and mathematical methods often arise through an integration of qualitative and quantitative concepts to identify patterns and processes. Thus, progress in the natural sciences and mathematics is maximized through interdisciplinary-collaborative teams built on separate and specific knowledge and approaches of their respective disciplines. Scientific endeavors increasingly depend on this integrative approach that includes interconnecting scientific theory, experimentation, and simulation. Solutions to the problems facing future generations will involve ever larger and more complex databases capturing information of ever finer resolution. The college's graduates become responsible lifelong learners, applying lessons learned in the natural sciences and mathematics to their professional and personal lives, changing the world as educators, scientists, and leaders.

College Majors

Biochemistry

Biology (Tracks available: Cell and Molecular; Ecology, Conservation, and Environmental Biology; Environmental Health; Pre-medical; Pre-veterinary; Honors)

Biology Education
Chemistry (Tracks available: Interdisciplinary Chemistry, Pre-medical, and Pre-pharmacy)
Chemistry Education
Computer Science (Tracks available: Cyber Security, Languages and Systems, Software Engineering)
Earth and Space Science Education
Environmental Engineering
Geology
Mathematics (Tracks available: Actuarial, Mathematics)
Mathematics Education
Natural Science (Tracks available: Pre-audiology, Pre-chiropractic, Pre-dentistry, Pre-optometry, Pre-pharmacy, Pre-physical Therapy, Pre-physician Assistant, Pre-podiatry)
Physics (Tracks available: Applied Physics, Nanomanufacturing Technology, Pre-engineering)
Physics Education
Psychology (Track available: Honors)

Interdisciplinary Programs, Minors and Certificates

The interdisciplinary degree programs, minors, and certificates are multidisciplinary and are not specific to one university college. The areas with significant coursework in our college are: Bachelor of Science in Public Health, Minors in Child and Adult Advocacy Studies, Cyber Security, Global Health, Professional Teamwork and Leadership, Sustainability, and the Scientific Communication Certificate. Visit Interdisciplinary Programs to view offerings and requirements.

Degree Requirements

In addition to the university's Liberal Studies requirements, all students seeking a baccalaureate degree in the KCNSM must complete the requirements for a major as established by the department through which they wish to specialize. Statements of these requirements and those for minoring in a specific field appear in the department sections that follow. A double major or minor may encompass a discipline outside as well as within the college but should be selected only with advisor approval. As a general principle, there is considerable latitude in course choice for Natural Sciences and Mathematics majors; for specifically required courses, substitution in any program must have the written approval of the student's department chairperson or the college dean.

Degrees

Students may earn a bachelor of arts degree in biology, computer science, or psychology. All other undergraduate tracks and programs are awarded bachelor of science degree.

Several departments in the college sponsor master of science, or professional science master's degrees. The Department of Psychology offers the doctor of clinical psychology degree. Information on these programs can be obtained from the School of Graduate Studies and Research.

Minors

Each department in the college offers a minor in their discipline. Note that minors may not include more than two courses from their department that also count for their major.

The Foreign Language Requirement

Several programs require some level of foreign language competency. See individual program requirements for more information.

Any foreign student, registered as such at IUP, whose acquired native language is other than English and who demonstrates an acceptable proficiency in English, is exempt from the foreign language requirement for a Natural Sciences and Mathematics degree if the department he/she is majoring in does not require a specific language not thus covered.

Internship Programs

Several departments in the KCNSM have established extensive internship programs under which students engage in an off-campus supervised work experience for credit. For more information about specific internship programs, students should consult with the chairperson of the department in which the student is majoring. Students eligible for internships may receive federal or state funding.

Preprofessional Programs

The college offers programs for the preparation of students for acceptance by a professional school: pre-medical (including osteopathic medicine) and pre-veterinary medicine. In addition, the college offers a major in the natural sciences for those students whose goal is audiology, dentistry, pharmacy or pharmacology, optometry, podiatry, chiropractic medicine, physician assistant or physical therapy. All programs are so designed that, should work at a professional school not ensue, the student may earn an IUP baccalaureate degree, provided he/she has been faithful to faculty advisement.

The preprofessional health programs in the college presuppose that the student has an excellent background in the high school sciences and mathematics and will prove to be an excellent college student. Students should identify their proposed field of study upon admission to IUP.

Cooperative Programs

IUP has been fortunate to enter into cooperative agreements with a number of outstanding institutions to provide significant career opportunities to students. These formal agreements provide for accelerated graduate or professional degree programs or carefully planned and coordinated undergraduate programming with the cooperating institution. Programs are intended to ensure acceptance of properly qualified students by the cooperating professional schools. Additional information about specific programs can be found under the appropriate academic department in this catalog.

Chiropractic (See Natural Science): The New York Chiropractic College, Palmer Chiropractic College, Sherman College of Straight Chiropractic, Parker College of Chiropractic, and Logan Chiropractic College programs are designed to accelerate professional training of IUP students in the field of chiropractic medicine.

Dentistry (see Natural Science)

Jefferson Medical College, Physician Shortage Area Program (See Department of Biology): The program increases the opportunities for IUP students to be admitted to Jefferson Medical College.*

Lake Erie College of Osteopathic Medicine (LECOM) (See Department of Biology): LECOM and IUP have a cooperative "3+4" program. Students will be awarded a BS degree with a major in biology from IUP upon successful completion of the first-year curriculum at LECOM and of the undergraduate requirements at IUP.*

Optometry (See Natural Science): The Pennsylvania College of Optometry program accelerates the professional training of IUP students in the field of optometry.

Pharmacy (see Natural Science): The Shenandoah University School of Pharmacy or LECOM School of Pharmacy programs are designed to accelerate the professional training of IUP students in the field of pharmacy.

Physical Therapy (see Natural Science): The Gannon University School of Physical Therapy program is designed to enhance the professional training of IUP students in the field of physical therapy.

Physician Assistant (See Natural Science): The Salus University Physician Assistant Studies program accelerates the professional training of IUP students in the field of physician assistant.

Podiatry (See Natural Science): The Temple University School of Podiatric Medicine program accelerates the professional training of IUP students in the field of podiatry.

Primary Care Scholars Program: This program enables the college to identify students with primary care potential and to provide these students with the opportunity to interact with primary care faculty, physicians, and medical students at the Pennsylvania State University College of Medicine for one week during the summer.*

Philadelphia College of Osteopathic Medicine (PCOM) (See Department of Biology): PCOM has established this "3+4" Early Acceptance program with IUP. The program will enable students who have demonstrated academic excellence and a commitment to the practice of medicine to gain a provisional acceptance to PCOM. Students will be awarded a BS degree with a major in biology from IUP upon successful completion of the first-year curriculum at PCOM and the undergraduate requirements at IUP.*

*Contact the pre-medical advisor, N. Bharathan, for specific information.

Minor

Child and Adult Advocacy Studies (CAAST) for Majors Other than Psychology and Sociology Minor

Advisor: Pearl Berman

Child and Adult Advocacy Studies is an 18-credit interdisciplinary undergraduate minor. It is designed for current undergraduate students enrolled at IUP. It provides mandated reporters and first responders in criminology, education, family studies, medicine, nursing, psychology, public health, sociology, social work, and other disciplines with evidence-based, culturally relevant knowledge and skills to improve the outcomes for victims and perpetrators of interpersonal violence across the lifespan. A student's major determines which CAAST minor s/he pursues: one minor has been designed for Psychology majors, one minor has been designed for Sociology majors, and one minor has been designed for all other majors.

Required Courses:

PSYC 101 - General Psychology **Credits:** 3 (1)

PSYC 322 - Violence Across the Life Span **Credits:** 3

SOC 151 - Principles of Sociology **Credits:** 3 (1)

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits:** 3 (1)

SOC 391 - Foundations of Sociological Practice **Credits:** 3

SOC 392 - Clinical Sociological Practice **Credits:** 3

Controlled Electives: 9

(2)

Three additional courses from the following:

PSYC 313 - Non-normative Development in Adulthood (CAAST) **Credits:** 3

or

PSYC 314 - Child and Adolescent Psychopathology (CAAST) **Credits:** 3

PSYC 332 - Community Psychology and Prevention Science (CAAST) **Credits:** 3

PSYC 380 - Gender and Violence **Credits:** 3

SOC 357 - Sociology of Aging and the Life-course **Credits:** 3

SOC 427 - Social Perspectives on Intimate Partner Violence **Credits:** 3

SOC 428 - Child Abuse **Credits:** 3

Total Minor Requirements: 18

(1) Credits counted in Liberal Studies, not in the minor.

(2) With the aid of a CAAST minor advisor, students will select classes (a) from both PSYC and SOC, and (b) that will cover the spectrum of violence across the lifespan.

Child and Adult Advocacy Studies (CAAST) for Psychology Majors Minor

(1, 2)

Advisor: Pearl Berman

Child and Adult Advocacy Studies is an 18-credit interdisciplinary undergraduate minor. It is designed for current undergraduate students enrolled at IUP. It provides mandated reporters and first responders in criminology, education, family studies, medicine, nursing, psychology, public health, sociology, social work, and other disciplines with evidence-based, culturally relevant knowledge and skills to improve the outcomes for victims and perpetrators of interpersonal violence across the lifespan. A student's major determines which CAAST minor s/he pursues: one minor has been designed for Psychology majors, one minor has been designed for Sociology majors, and one minor has been designed for all other majors.

Required Courses:

PSYC 101 - General Psychology **Credits:** 3 (3)

PSYC 322 - Violence Across the Life Span **Credits:** 3

SOC 151 - Principles of Sociology **Credits:** 3 (3)

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits:** 3 (3)

SOC 391 - Foundations of Sociological Practice **Credits:** 3

SOC 392 - Clinical Sociological Practice **Credits:** 3

Controlled Electives:

PSYC Course

One additional PSYC course from the following:

PSYC 313 - Non-normative Development in Adulthood (CAAST) **Credits:** 3

PSYC 314 - Child and Adolescent Psychopathology (CAAST) **Credits:** 3

PSYC 332 - Community Psychology and Prevention Science (CAAST) **Credits:** 3

PSYC 380 - Gender and Violence **Credits:** 3

PSYC 493 - Psychological Practicum **Credits:** 1-12

SOC Courses

Two additional SOC courses from the following:

SOC 357 - Sociology of Aging and the Life-course **Credits:** 3

SOC 427 - Social Perspectives on Intimate Partner Violence **Credits:** 3

SOC 428 - Child Abuse **Credits:** 3

Total Minor Requirements: 18

(1) Students majoring in Sociology/Human Services Track are not eligible to take this minor; instead, they must take the CAAST minor that has been designed for students pursuing a major in Sociology/Human Services Track.

(2) Students who are Psychology majors can only have two PSYC courses that count for their major and the CAAST minor.

(3) Credits counted in Liberal Studies, not in the minor.

Child and Adult Advocacy Studies (CAAST) for Sociology/Human Services Track Majors Minor

Advisor: Pearl Berman

(1, 2, 3)

Child and Adult Advocacy Studies is an 18-credit interdisciplinary undergraduate minor. It is designed for current undergraduate students enrolled at IUP. It provides mandated reporters and first responders in criminology, education, family studies, medicine, nursing, psychology, public health, sociology, social work, and other disciplines with evidence-based, culturally relevant knowledge and skills to improve the outcomes for victims and perpetrators of interpersonal violence across the lifespan. A student's major determines which CAAST minor s/he pursues: one minor has been designed for Psychology majors, one minor has been designed for Sociology majors, and one minor has been designed for all other majors.

Required Courses:

PSYC 101 - General Psychology **Credits:** 3 (4)
PSYC 313 - Non-normative Development in Adulthood (CAAST) **Credits:** 3
or
PSYC 314 - Child and Adolescent Psychopathology (CAAST) **Credits:** 3
PSYC 322 - Violence Across the Life Span **Credits:** 3
PSYC 332 - Community Psychology and Prevention Science (CAAST) **Credits:** 3
PSYC 380 - Gender and Violence **Credits:** 3
SOC 151 - Principles of Sociology **Credits:** 3 (4)
or
SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits:** 3 (4)

Controlled Electives: 6

Two courses from the following:

SOC 357 - Sociology of Aging and the Life-course **Credits:** 3
SOC 427 - Social Perspectives on Intimate Partner Violence **Credits:** 3
SOC 428 - Child Abuse **Credits:** 3

Total Minor Requirements: 18

- (1) Students majoring in Psychology are not eligible to take this minor; instead, they must take the CAAST minor that has been designed for students pursuing a major in Psychology.
- (2) Students who are Sociology/Human Services Track majors can only have two SOC courses that count for their major and the CAAST minor.
- (3) Sociology/General Track majors who wish to get a CAAST minor must take SOC 391 and SOC 392 as part of their free electives.
- (4) Credits counted in Liberal Studies, not in the minor.

Biology

Website: www.iup.edu/biology
Narayanaswamy Bharathan, Chair

Degree programs offered by the Department of Biology are the Bachelor of Science degree program in biology (and its specialized tracks), the Bachelor of Arts degree program in biology, and the Bachelor of Science in Education with a biology certification. The department also offers minors in animal behavior, biology, biomedical science, environmental microbiology, forensic biosciences, neurobiology, and wildlife and conservation biology.

Additionally, for the BS Biology/Pre-medical track option, the department also offers an interdisciplinary dual baccalaureate option with Medical Technology (College of Health and Human Services), and a sub-baccalaureate certificate in Cell and Molecular Biology.

Accelerated MS Track

The department offers an accelerated curriculum that provides an alternative pathway for progression through the requirements for the master of science degree with a major in biology. Although a graduate program, the Accelerated MS Track begins during and overlaps with the undergraduate program. By taking advantage of this track, a highly motivated undergraduate student can, with appropriate planning beginning in the junior year, tailor his or her curriculum to complete the requirements for both the BS—Biology and MS—Biology in a total of five calendar years. Upon completion of this accelerated program, students will be prepared for skilled technical positions in the industrial or academic workforce or for advanced study in outstanding graduate or professional schools. Undergraduate students should consult the *Graduate Catalog* or contact the Biology Department graduate coordinator for more information.

Cooperative Programs

The department cooperates in programs with Jefferson Medical College, Lake Erie College of Osteopathic Medicine, and Pymatuning Laboratory of Ecology.

Jefferson Medical College, Physician Shortage Area Program (PSAP): IUP is a participating affiliate of the PSAP, established by Jefferson Medical College of Thomas Jefferson University in Philadelphia for the purpose of increasing the distribution of physicians practicing in underserved areas of Pennsylvania. To be eligible for this special program, students must be from, or have spent a significant amount of time living in, a non-urban area. Students interested in this program should enroll as biology/pre-medical majors.

This program will admit approximately four graduates of IUP and 20 graduates of other colleges each year. Students from IUP will be admitted only if properly qualified according to the admission standards and policies of Jefferson Medical College. Applications are reviewed by the Joint IUP Jefferson Subcommittee, and recommendations are made to the Jefferson Committee on Admissions. Preference will be given to Pennsylvania residents who are interested in this program, with highest priority given to those who actually live, at the time of application, in the underserved area in which they hope to practice.

Osteopathic Medicine: IUP Biology has "Early Acceptance" agreement with Lake Erie College of Osteopathic Medicine (LECOM), and an affiliation agreement with Philadelphia College of Osteopathic Medicine (PCOM). The admission requirements for both are listed below. For further information, please contact Pre-Med Program Coordinator, Dr. N. Bharathan at bharathn@iup.edu

LECOM Early Admission Program (EAP) (3+4) or (4+4):

The EAP allows qualifying students to gain admission into the medical college as long as they have a minimum GPA of 3.5 or better in the BS Biology/Pre-Medical curriculum at IUP. No MCAT is required. To submit an EAP application, student should consult with Dr. N. Bharathan, Pre-Med Program Coordinator.

Requirements:

1. High school GPA of 3.5 or Higher on a 4.0 scale.
2. ACT score of at least 26 or SAT Composite of at least 1240. LECOM does not super score.
3. Students admitted to the Biology Pre-Med program at IUP.

Philadelphia College of Osteopathic Medicine (PCOM) affiliation:

Requirements:

1. Students should be enrolled in the Biology Pre-Med program at IUP.
2. GPA requirement of a minimum of 3.25 for BOTH cumulative and Science GPA.
3. Students in the DO program must be US citizens or Permanent Resident status applicants.
4. MCAT is required with a composite of 504 with 126 on each section.

Pymatuning Laboratory of Ecology: Biology majors can expand their selection of course offerings by participating in a cooperative program with the University of Pittsburgh's Field Station at the Pymatuning Laboratory of Ecology located in northwestern Pennsylvania. These elective courses center on ecological and environmental topics and vary annually. Application and registration for both summer sessions must be completed by April 1. Students usually register for credit and pay fees at IUP. Books, lab fee, and room and board are paid to the Pymatuning Laboratory of Ecology. The faculty advisor for this program assists students in program planning, application, and registration.

Degree Programs

In the programs of study that follow, no more than a total of 6 credits from internships, independent study, and special topics can be counted toward biology course requirements. Credits beyond 6 earned from these sources are counted as general electives. Note: Students changing into the majors of biology or biology education are required to have a 2.5 cumulative GPA or permission of the chairperson.

Bachelor of Arts

Biology, BA

The Bachelor of Arts degree program in biology is designed for students who wish to combine a primary academic interest in biology with additional training in a complementary field. This curriculum allows the greatest overall flexibility in a student's program of study by providing them with the

opportunity to earn a minor in their complementary field as well as a second minor through their free electives. The primary biology major combined with two minors can make an attractive educational package for the student and for potential employers. Examples of complementary fields that might enhance a student's competitiveness in the job market include anthropology, business administration, criminology, economics, foreign language, LGBT&Q, marketing, pre-law, psychology, safety sciences, sociology, sustainability, women and gender studies, or others of interest.

Liberal Studies: 44-45

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 105 - College Algebra **Credits:** 3

or

MATH 121 - Calculus I for Natural and Social Sciences **Credits:** 4

Natural Science:

CHEM 111 - General Chemistry I **Credits:** 4

CHEM 112 - General Chemistry II **Credits:** 4

Social Science:

one course should also fulfill GMA requirement

Liberal Studies Elective: 3

MATH 217 - Probability and Statistics **Credits:** 3

Major: 37

Required Core Courses:

BIOL 201 - Principles of Ecology and Evolution **Credits:** 4

BIOL 202 - Principles of Cell and Molecular Biology **Credits:** 4

BIOL 203 - Principles of Genetics and Development **Credits:** 4

Controlled Electives: 21

Biology major courses only (1, 2)

Other Requirements:

PHYS 111 - Physics I Lecture **Credits:** 3

PHYS 121 - Physics I Lab **Credits:** 1

Planned Minor in Complementary Field: 18-20

requires advisor approval (3)

Other Requirements:

Exit survey for assessment purposes

Free Electives: 18-21

(4)

Total Degree Requirements: 120

(1) No more than 6cr total from Independent Study, Special Topics, or Internship applies to major; excess applied as free electives.

(2) No more than 4cr can come from 100-level courses. Excluding prerequisite, cognate, liberal studies, college core courses, no more than two majors' courses can be shared between a major and minor.

(3) Courses appropriate for a Minor in a complementary field of interest should be selected. Please refer to BA-Biology catalog description for details.

(4) Free electives may be used towards a Biology Department Minor such as Animal Behavior, Biomedical Science, Forensic Biosciences, Environmental Microbiology, Neurobiology, Wildlife and Conservation Biology, or other minors of interest.

Bachelor of Science

Biology, BS

In addition to the bachelor of science degree with no specialization, the department also offers these specialized bachelor of science tracks: Cell and Molecular Biology; Ecology, Conservation, and Evolutionary Biology; Honors Biology; Pre-medical Biology; and Pre-veterinary Biology. Students who pursue the Pre-medical or Pre-veterinary Track must maintain a minimum cumulative GPA of 3.0 after their third semester in the program to continue in that track. All students, including transfer students, must have a cumulative GPA of 3.0 or higher to transfer into the Pre-medical or Pre-veterinary Track after their third semester. For qualified BS Biology Pre-medical track students with a GPA of 3.25 and above, there is an interdisciplinary dual baccalaureate offering. Additionally, students in each track will have the opportunity to apply the free electives credits towards a minor from Biology, such as Animal Behavior, Biomedical Science, Forensic Biosciences, Environmental Microbiology, Neurobiology, Wildlife and Conservation Biology, or others of interest.

Please refer to the section on individual Biology department Minors for their description and curricular requirements. Also please refer to the different Biology degree program and tracks for detailed distribution of credits, curricular requirements, and interdisciplinary opportunities.

Interdisciplinary Dual Baccalaureate: BS Biology/Pre-Medical Track and BS Medical Technology

This dual baccalaureate is an interdisciplinary, collaborative program between two colleges to meet work force demands and provide viable career options to our post baccalaureate students. Dr. Joyce Shanty (Allied Health Professions Programs Coordinator, College of Health and Human Services) will collaborate with Biology faculty and help academically to advise students in the dual baccalaureate program.

The curricular structure in the dual bachelor of science degree in BS Biology/Pre-Medical Track and BS Medical Technology would be a natural fit for students seeking to work as a medical technologist in a clinical, laboratory, or biotechnology setting. This program would also benefit students seeking employment experience prior to medical or graduate school admissions.

Students with a GPA of 3.25 and above enrolled in the BS Medical Technology/BS Biology-Pre-Medical dual degree programs would be eligible to apply for a one year of clinical experience with an affiliated, hospital-based schools of Medical Technology. Areas of instruction will be consistent with requirements of the National Accrediting Agency of Clinical Laboratory Sciences. Following training the students will qualify for the national certification examination. Successful results on this examination will lead to certification as professionally qualified medical technologist/clinical laboratory scientist.

Upon completion of the clinical training at an articulated clinical affiliate, IUP will grant 30 credits that which will be applied to the student's transcript towards their bachelor of science degree in medical technology. Qualified students in this program would have completed a minimum of

150 credits, to receive a dual bachelor of science in biology/pre-medical track and medical technology along with certification to work as a professionally qualified medical technologist.

The bachelor of science degree in biology with no specialization is designed to provide depth in the biological sciences, combined with flexibility in the choice of courses for an interdisciplinary minor. This program allows the student (in consultation with the advisor) to graduate with an interdisciplinary minor and a minor from biology such as animal behavior, environmental Microbiology, forensic biosciences, biomedical science, neurobiology, or wildlife and conservation biology.

Liberal Studies: 45

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**

Natural Science:

CHEM 111 - General Chemistry I **Credits: 4**

CHEM 112 - General Chemistry II **Credits: 4**

Social Science:

one course should also fulfill GMA requirement

Liberal Studies Elective: 3

No courses with BIOL prefix

MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**

or

MATH 217 - Probability and Statistics **Credits: 3**

Major: 36

Required Core Courses:

BIOL 201 - Principles of Ecology and Evolution **Credits: 4**

BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**

BIOL 203 - Principles of Genetics and Development **Credits: 4**

Controlled Biology Electives: 24

Biology electives (major courses only) (1,2)

A minimum of 12cr must be in courses at the 300-400 level.

Biology Concentration: 7-8

CHEM 231 - Organic Chemistry I **Credits: 4**

CHEM 351 - Biochemistry **Credits: 4**

or

BIOC 301 - Foundations of Biochemistry **Credits: 3**

An additional 16-17cr from the following, requires advisor approval (3):

ANTH, BIOL majors' courses only, CAAST, CHEM, CRIM, GEOG, GEOS, FDNT, LGBT&Q, MATH, PHIL, PLSC, PSYC, PUBH, RGPL, SAFE, SOC, SUST, WGS, or other courses of interest.

Other Requirements:

Exit survey for assessment purposes

Free Electives: 15

(4)

Total Degree Requirements: 120

(1) No more than 6cr total from Independent Study, Special Topics, or Internship applies to major; excess applied as free electives.

(2) No more than 4crs can come from 100-level courses. Excluding prerequisite, cognate, liberal studies, college core courses, no more than two majors' courses can be shared between a major and minor.

(3) For BS Biology majors, courses appropriate for a Minor of interest should be selected.

(4) Free Electives will be used toward a Minor such as Animal Behavior, Biomedical Science, Forensic Biosciences, Environmental Microbiology, Neurobiology, Wildlife and Conservation Biology, or other minors of interest.

Cell and Molecular Biology Track, Biology, BS

Students electing the bachelor of science degree with an emphasis in cell and molecular biology take the core biology courses and, in addition, a collection of upper-division courses that focus collectively on important aspects of modern cell and molecular biology. This track will prepare students for employment in technical positions or for graduate studies in cell biology, molecular biology, biotechnology, or related biomedical disciplines.

Liberal Studies: 44-45

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 105 - College Algebra **Credits: 3**

or

MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**

Natural Science:

CHEM 111 - General Chemistry I **Credits: 4**

CHEM 112 - General Chemistry II **Credits: 4**

Social Science:

One course should also fulfill GMA requirement

Liberal Studies Elective: 3

MATH 216 - Probability and Statistics for Natural Sciences **Credits:** 3

or

MATH 217 - Probability and Statistics **Credits:** 3

Major: 48

Required Core Courses:

BIOL 201 - Principles of Ecology and Evolution **Credits:** 4

BIOL 202 - Principles of Cell and Molecular Biology **Credits:** 4

BIOL 203 - Principles of Genetics and Development **Credits:** 4

Required Biology Courses:

BIOL 241 - Introductory Medical Microbiology **Credits:** 4

BIOL 331 - Developmental Biology **Credits:** 3

BIOL 405 - The Biology of the Cell - Critical Thinking **Credits:** 2

BIOL 410 - Molecular Biology Topics **Credits:** 3

BIOL 411 - Forensic Biology Laboratory Operations **Credits:** 4

Controlled Biology Electives: 16-17

(1,2)

BIOL 105 - Cell Biology **Credits:** 3

BIOL 117 - Understanding HIV Biology and AIDS **Credits:** 3

BIOL 123 - Perspectives in Cell and Molecular Biology **Credits:** 1

BIOL 200 - Medical Terminology **Credits:** 2

BIOL 281 - Special Topics **Credits:** 1-3 (2)

BIOL 300 - Genetics in Medicine and Nutrition **Credits:** 3

BIOL 301 - Fundamentals of Epidemiology **Credits:** 3

BIOL 310 - Applied Entomology and Zoonoses **Credits:** 3

BIOL 323 - Introduction to Toxicology and Risk Assessment **Credits:** 3

BIOL 352 - Comparative Animal Physiology **Credits:** 3

BIOL 364 - Immunology **Credits:** 3

BIOL 409 - Pharmacology Principles and Applications **Credits:** 3

BIOL 430 - Gene Editing Tools in Medicine and Biotechnology **Credits:** 3

BIOL 462 - Vertebrate Endocrinology **Credits:** 3

BIOL 466 - Principles of Virology **Credits:** 3

BIOL 469 - Circadian Rhythms and Sleep **Credits:** 3

BIOL 477 - Neurobiology **Credits:** 3

BIOL 478 - Mycology and Plant Pathology **Credits:** 3

BIOL 479 - Neurobiology of Addiction **Credits:** 3

BIOL 481 - Special Topics **Credits:** 1-3

BIOL 482 - Independent Study **Credits:** 1-3

BIOL 483 - Honors Thesis/Independent Study **Credits:** 1-6

BIOL 484 - Honors Seminar **Credits:** 2

BIOL 493 - Biology Internship **Credits:** 3-12

or other biology major courses by permission of advisor and department chair

Controlled Electives: 3-4

Any BIOL course at 300 level or above; or

CHEM 351 - Biochemistry **Credits:** 4

or BIOC course

Required Science Courses: 12

CHEM 231 - Organic Chemistry I **Credits: 4**

CHEM 351 - Biochemistry **Credits: 4**

PHYS 111 - Physics I Lecture **Credits: 3**

PHYS 121 - Physics I Lab **Credits: 1**

Other Requirements:

Exit survey for assessment purposes

Free Electives: 15-16

(3)

Total Degree Requirements: 120

(1) No more than 6cr total from Independent Study, Special Topics, or Internship applies to major; excess applied as free electives.

(2) No more than 4cr can come from 100-level courses. Excluding prerequisite, cognate, liberal studies, college core courses, no more than 2 Majors courses can be shared between a major and minor.

(3) Free electives may be used towards a Minor such as Animal Behavior, Biomedical Science, Forensic Biosciences, Environmental Microbiology, Neurobiology, or other minors of interest.

Ecology, Conservation, and Evolutionary Biology Track, Biology, BS

The Ecology, Conservation, and Evolutionary Biology (ECEB) Track includes all core biology courses and a selection of related courses that focus on ecological and environmental sciences. To achieve an environmental focus, the student must complete broad training in the sciences and mathematics. The track is designed to provide flexibility to allow pursuit of specialized interests within ECEB, including minors in other environmental disciplines (Applied Statistics, Geology, Geography, Regional Planning, and Sustainability). Course requirements for professional certification by the Ecological Society of America (Certified Associate Ecologist) and/or the Wildlife Society (Certified Wildlife Biologist) can be met within this track. This track prepares students for pursuing advanced degrees or employment in areas related to ecology and environmental sciences at universities, government, and private companies.

Liberal Studies: 45

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**

Natural Science:

CHEM 111 - General Chemistry I **Credits: 4**

CHEM 112 - General Chemistry II **Credits: 4**

or

CHEM 113 - Advanced General Chemistry I **Credits: 4**

CHEM 114 - Advanced General Chemistry II **Credits: 4**

Liberal Studies Elective: 3

MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**

or

MATH 217 - Probability and Statistics **Credits: 3**

Major: 42-43

Required Core Courses:

BIOL 201 - Principles of Ecology and Evolution **Credits: 4**

BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**

BIOL 203 - Principles of Genetics and Development **Credits: 4**

Required Biology Courses:

BIOL 205 - Ecological Methods **Credits: 3**

BIOL 210 - Plant Biology **Credits: 3**

BIOL 220 - General Zoology **Credits: 3**

BIOL 272 - Conservation of Plant and Animal Resources **Credits: 3**

BIOL 362 - Ecology **Credits: 3**

BIOL 451 - Evolutionary Biology **Credits: 3**

BIOL 490 - Field Studies in Biology **Credits: 1-4**

or

BIOL 450 - Field Biology at Pymatuning Laboratory of Ecology **Credits: 4**

Controlled Biology Electives: 9

Biology major courses only (1)

Other Science Requirements: 17

GEOS 201 - Foundations of Geology **Credits: 4**

GEOG 316 - Introduction to Geographic Information Systems **Credits: 3**

Controlled Electives: 10

(2)

Select 10cr from the following (cannot include Liberal Studies Elective, or courses counting toward Other Requirements):

A course at the 200 level or higher in addition to specified courses from the following majors:

ANTH;

BIOC;

BIOL;

CHEM;

COSC 110 - Problem Solving and Structured Programming **Credits: 3**

ECON 121 - Principles of Macroeconomics **Credits: 3**

ECON 122 - Principles of Microeconomics **Credits: 3**

ENVE 101 - Introduction to Environmental Engineering **Credits: 3**

GEOG;

GEOS;
MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**
MATH 122 - Calculus II for Natural and Social Sciences **Credits: 4**
MATH 171 - Introduction to Linear Algebra **Credits: 3**
PHYS 111 - Physics I Lecture **Credits: 3**
PHYS 121 - Physics I Lab **Credits: 1**
PSYC;
PUBH 122 - Foundations of Public Health **Credits: 3**
RGPL;
SUST;

Additional courses:

CRIM 374 - Environmental Crime and Justice **Credits: 3**
FDNT 470 - Human Food Consumption Patterns **Credits: 3**
PHIL 270 - Ethics and the Environment **Credits: 3**
PHIL 330 - Philosophy of Science **Credits: 3**
SAFE 310 - Environmental Safety and Health Regulations and Sustainability **Credits: 3**

Free Electives: 15-16

(3,4)

Total Degree Requirements: 120

- (1) No more than 6cr total from Independent Study, Special Topics, or Internship applies to major; excess applied as free electives.
- (2) Other appropriate BIOL courses at 200-level and above (excluding Liberal Studies courses) in the above departments may be substituted with permission of the advisor and the Biology Department chairperson in advance of taking the course.
- (3) Free electives may be used towards a minor or certificate in Geography/Regional Planning, Sustainability, Applied Statistics, Chemistry, Forensic Biosciences, Environmental Microbiology, Foreign Language, or other areas of interest.
- (4) Excluding prerequisite, cognate, liberal studies, college core courses, no more than 2 Majors courses can be shared between a major and minor.

Pre-medical Track, Biology, BS

Liberal Studies: 45

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**

Natural Science:

CHEM 111 - General Chemistry I **Credits: 4**
CHEM 112 - General Chemistry II **Credits: 4**

Social Science:

PSYC 101 - General Psychology **Credits: 3**
SOC 151 - Principles of Sociology **Credits: 3**

or
SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits:** 3 (1)

Liberal Studies Elective: 3

MATH 216 - Probability and Statistics for Natural Sciences **Credits:** 3

or

MATH 217 - Probability and Statistics **Credits:** 3

Major: 44-45

Required Core Courses:

BIOL 201 - Principles of Ecology and Evolution **Credits:** 4

BIOL 202 - Principles of Cell and Molecular Biology **Credits:** 4

BIOL 203 - Principles of Genetics and Development **Credits:** 4

Required Biology Courses:

BIOL 240 - Human Physiology **Credits:** 4

BIOL 241 - Introductory Medical Microbiology **Credits:** 4

BIOL 331 - Developmental Biology **Credits:** 3

BIOL 402 - Advanced Human Anatomy **Credits:** 4

Controlled Biology Electives: 14

(2,3)

BIOL 105 - Cell Biology **Credits:** 3

BIOL 200 - Medical Terminology **Credits:** 2

BIOL 221 - Environmental Health and Protection **Credits:** 4

BIOL 300 - Genetics in Medicine and Nutrition **Credits:** 3

BIOL 301 - Fundamentals of Epidemiology **Credits:** 3

BIOL 310 - Applied Entomology and Zoonoses **Credits:** 3

BIOL 323 - Introduction to Toxicology and Risk Assessment **Credits:** 3

BIOL 342 - Comparative Vertebrate Anatomy **Credits:** 3

BIOL 352 - Comparative Animal Physiology **Credits:** 3

BIOL 364 - Immunology **Credits:** 3

BIOL 405 - The Biology of the Cell - Critical Thinking **Credits:** 2

BIOL 409 - Pharmacology Principles and Applications **Credits:** 3

BIOL 410 - Molecular Biology Topics **Credits:** 3

BIOL 420 - Entomology Principles and Practice **Credits:** 3

BIOL 430 - Gene Editing Tools in Medicine and Biotechnology **Credits:** 3

BIOL 455 - Animal Behavior **Credits:** 3

BIOL 456 - Ecological Toxicology **Credits:** 3

BIOL 462 - Vertebrate Endocrinology **Credits:** 3

BIOL 466 - Principles of Virology **Credits:** 3

BIOL 469 - Circadian Rhythms and Sleep **Credits:** 3

BIOL 477 - Neurobiology **Credits:** 3

BIOL 478 - Mycology and Plant Pathology **Credits:** 3

BIOL 479 - Neurobiology of Addiction **Credits:** 3

BIOL 480 - Biology Seminar **Credits:** 1

BIOL 481 - Special Topics **Credits:** 1-3

BIOL 482 - Independent Study **Credits:** 1-3

BIOL 483 - Honors Thesis/Independent Study **Credits:** 1-6
BIOL 484 - Honors Seminar **Credits:** 2
BIOL 493 - Biology Internship **Credits:** 3-12
other biology major courses by permission of advisor and department chair

Controlled Electives: 3-4cr

Any BIOL course at 300 level or above; or CHEM 332 or BIOC 311 or BIOC 402 or BIOC 412

Ancillary Science Requirements: 15-16

CHEM 231 - Organic Chemistry I **Credits:** 4

CHEM 351 - Biochemistry **Credits:** 4

or

BIOC 301 - Foundations of Biochemistry **Credits:** 3

PHYS 111 - Physics I Lecture **Credits:** 3

PHYS 121 - Physics I Lab **Credits:** 1

PHYS 112 - Physics II Lecture **Credits:** 3

PHYS 122 - Physics II Lab **Credits:** 1

Other Requirements:

Exit survey for assessment purposes

Free Electives: 15

(4,5)

Total Degree Requirements: 120

- (1) If students enroll for SOC 151, then third Social Science course should also fulfill the GMA requirement.
- (2) A minimum of 12 credits must be in courses at 300-400 level.
- (3) No more than 4 credits can come from 100-level courses. No more than 6 credits total from independent study, special Topics, or internship applies to major.
- (4) Free electives may be used towards an animal behavior, chemistry, child and adult advocacy studies (CAAST), environmental microbiology, forensic biosciences, global health, neurobiology, psychology, or other minors of interest.
- (5) Excluding prerequisite, cognate, liberal studies, college core courses, no more than two major's courses can be shared between a major and minor.

Pre-veterinary Track, Biology, BS

Liberal Studies: 45

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**

Natural Science:

CHEM 111 - General Chemistry I **Credits: 4** and
CHEM 112 - General Chemistry II **Credits: 4**

Social Science:

one course should also fulfill GMA requirement

Liberal Studies Elective: 3

MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**
or
MATH 217 - Probability and Statistics **Credits: 3**

Major: 44-45

Required Core Courses:

BIOL 201 - Principles of Ecology and Evolution **Credits: 4**
BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**
BIOL 203 - Principles of Genetics and Development **Credits: 4**

Required Biology Courses:

BIOL 220 - General Zoology **Credits: 3**
BIOL 241 - Introductory Medical Microbiology **Credits: 4**
BIOL 331 - Developmental Biology **Credits: 3**
BIOL 342 - Comparative Vertebrate Anatomy **Credits: 3**
BIOL 352 - Comparative Animal Physiology **Credits: 3**

Controlled Biology Electives: 13

Biology major courses only (1,2)

Controlled Electives: 3-4

Any BIOL course at 300 level or above; or
CHEM 332 - Organic Chemistry II **Credits: 4**
or
BIOC 311 - Biochemistry Laboratory I **Credits: 1**
or
BIOC 402 - Advanced Biochemistry **Credits: 3**
or
BIOC 412 - Advanced Biochemistry Laboratory **Credits: 1**

Ancillary Science Requirements: 15-16

CHEM 231 - Organic Chemistry I **Credits: 4**

CHEM 351 - Biochemistry **Credits: 4**

or

BIOC 301 - Foundations of Biochemistry **Credits: 3**

PHYS 111 - Physics I Lecture **Credits: 3**

PHYS 121 - Physics I Lab **Credits: 1**

PHYS 112 - Physics II Lecture **Credits: 3**

PHYS 122 - Physics II Lab **Credits: 1**

Other Requirements:

Exit survey for assessment purposes (3)

Free Electives: 15

(4)

Total Degree Requirements: 120

(1) No more than 6cr total from Independent Study, Special Topics, or Internship applies to major; excess applied as free electives.

(2) No more than 4crs can come from 100-level courses. Excluding prerequisite, cognate, liberal studies, college core courses, no more than two major's courses can be shared between a major and minor.

(3) With input from academic advisor, completion of at least four CITI modules in animal biology.

(4) Free electives may be used towards a Biology department Minor such as Animal Behavior, Biomedical Science, Environmental Microbiology, Forensic Biosciences, Neurobiology, Wildlife and Conservation Biology, or other minors of interest.

Bachelor of Science in Education

Biology, BSED

The Department of Biology, in conjunction with the College of Education and Communications, provides a program leading to the bachelor of science in education with certification to teach biology. The program is committed to preparing teachers who possess a strong foundation in biology, a broad background in associated sciences, and an extensive preparation in pedagogy.

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 110 - Elementary Functions **Credits: 3 (1)**

Natural Science:

CHEM 111 - General Chemistry I **Credits: 4**

CHEM 112 - General Chemistry II **Credits:** 4
or
CHEM 113 - Advanced General Chemistry I **Credits:** 4
CHEM 114 - Advanced General Chemistry II **Credits:** 4

Social Science:

PSYC 101 - General Psychology **Credits:** 3

Liberal Studies Electives: 7

MATH 217 - Probability and Statistics **Credits:** 3
GEOS 201 - Foundations of Geology **Credits:** 4
No courses with BIOL prefix

College of Education: 31

Preprofessional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits:** 3
EDSP 102 - Educational Psychology **Credits:** 3

Professional Education Sequence:

EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits:** 2
EDEX 323 - Instruction of English Language Learners with Special Needs **Credits:** 2
EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits:** 3
EDUC 242 - Pre-student Teaching Clinical Experience I **Credits:** var-1
EDUC 342 - Pre-student Teaching Clinical Experience II **Credits:** 1
EDUC 441 - Student Teaching **Credits:** 5-12
EDUC 442 - School Law **Credits:** 1
EDUC 451 - Teaching Science in the Secondary School **Credits:** 3

Major: 28

Required Courses:

BIOL 201 - Principles of Ecology and Evolution **Credits:** 4
BIOL 202 - Principles of Cell and Molecular Biology **Credits:** 4
BIOL 203 - Principles of Genetics and Development **Credits:** 4

Required Biology Course:

BIOL 480 - Biology Seminar **Credits:** 1

Controlled Electives: 15

Biology electives: (major courses only) (2)

One course from each area: Cell and Molecular Area, Ecology Area, Organismal Area (A list of courses in each area is available on the Biology Department website or at the Biology office.) A minimum of 6cr must be in courses at the 488 level. At least one course must be a field biology course.

Other Science Requirements: 12

CHEM 231 - Organic Chemistry I **Credits: 4**
CHEM 351 - Biochemistry **Credits: 4 (3)**

PHYS 151 - Medical Physics Lecture **Credits: 3**
and
PHYS 161 - Medical Physics Lab **Credits: 1**

Other Science Requirements:

Exit survey for assessment purposes

Free Electives: 1

Total Degree Requirements: 120

See advisory paragraph "Timely Completion of Degree Requirements" in the section on Requirements for Graduation.

- (1) MATH 121 may be substituted for MATH 110.
- (2) No more than 3cr total from Independent Study, Special Topics, or Internship applies to major; excess applied as free electives.
- (3) The two-semester (6cr) sequence of BIOC 301-BIOC 402 can be substituted for CHEM 351 to meet the biochemistry requirement.

Minor

Animal Behavior Minor

Animal Behavior is the study of how living organisms interact with their environment and each other. This minor is intended for our students to gain knowledge of key concepts and principles in animal behavior, cognition and evolutionary relationships. This minor will provide our students with an option beyond veterinary medicine, such as graduate school, further training as veterinary assistants, wildlife technicians, or working in government and private institutions, zoos, and conservation groups.

Required Courses: 6

BIOL 220 - General Zoology **Credits: 3**
BIOL 455 - Animal Behavior **Credits: 3**

Controlled Elective Courses: 12

(1,2)

BIOL 205 - Ecological Methods **Credits: 3**
BIOL 261 - Ornithology **Credits: 3**
BIOL 272 - Conservation of Plant and Animal Resources **Credits: 3**
BIOL 352 - Comparative Animal Physiology **Credits: 3**
BIOL 362 - Ecology **Credits: 3**
BIOL 425 - Herpetology **Credits: 3**
BIOL 431 - Ichthyology **Credits: 3**

BIOL 450 - Field Biology at Pymatuning Laboratory of Ecology **Credits: 4**

or

BIOL 490 - Field Studies in Biology **Credits:** 1-4

BIOL 451 - Evolutionary Biology **Credits:** 3

BIOL 475 - Mammalogy **Credits:** 3

BIOL 481 - Special Topics **Credits:** 1-3

Total Minor Requirements: 18

(1) Other appropriate BIOL courses at 200 level and above may be substituted with permission of the advisor and the Biology department chair in advance of taking the course.

(2) No more than two of majors courses can apply (excluding prerequisite, liberal studies, cognate or college core courses) towards Minor.

Biology Minor

The Biology minor is intended for students in the Nursing and Allied Health or Natural Science programs. Not for Biology majors. The Biomedical Science minor is intended for students interested in the health field, including Biology majors as long as there is a maximum of two course overlap between Majors and Minors courses.

Required Courses: 8

(1, 2)

BIOL 103 - Life on Earth **Credits:** 4

BIOL 104 - Human Biology: How the Human Body Works **Credits:** 4

BIOL 106 - Human Genetics and Health **Credits:** 3

BIOL 116 - Human Genetics and Health Laboratory **Credits:** 1

Additional BIOL courses: 10

(3,4)

Other Requirements:

Student must have at least a 2.0 GPA in all BIOL courses for the minor.

Student must take at least 6cr of biology courses at IUP.

Must have permission of Biology Department chairperson.

Total Minor Requirements: 18

(1) Student must take two of the three required courses.

(2) Two of the following courses may be substituted for the required courses: BIOL 201, BIOL 202 or BIOL 203.

(3) With approval of department chairperson.

(4) At least six of the 10 required additional BIOL cr must come from 300-level or higher courses.

Biomedical Science Minor

Minor track intended for students interested in the health field, including Biology majors as long as there is maximum of two course overlap between Majors and Minors courses.

Required Courses: 12

BIOL 150 - Human Anatomy **Credits: 4**
BIOL 240 - Human Physiology **Credits: 4**
BIOL 241 - Introductory Medical Microbiology **Credits: 4**

Controlled Electives: 6

(1)

6 credits from the following:

BIOL 310 - Applied Entomology and Zoonoses **Credits: 3**
BIOL 323 - Introduction to Toxicology and Risk Assessment **Credits: 3**
BIOL 364 - Immunology **Credits: 3**
BIOL 405 - The Biology of the Cell - Critical Thinking **Credits: 2**
BIOL 410 - Molecular Biology Topics **Credits: 3**
BIOL 460
BIOL 466 - Principles of Virology **Credits: 3**
BIOL 477 - Neurobiology **Credits: 3**

Total Minor Requirements: 18

(1) Other BIOL content courses with the approval of the minor advisor.

Environmental Microbiology Minor

Minor track intended for students interested in the field of environmental microbiology. The minor courses will introduce students to the diversity of microbial populations and their roles in environmental process, and overall health of this planet.

Required Courses:

(1)

BIOL 105 - Cell Biology **Credits: 3**
BIOL 201 - Principles of Ecology and Evolution **Credits: 4**
BIOL 205 - Ecological Methods **Credits: 3**
BIOL 241 - Introductory Medical Microbiology **Credits: 4**
BIOL 364 - Immunology **Credits: 3**
BIOL 478 - Mycology and Plant Pathology **Credits: 3**

Total Minor Requirements: 20

(1) No more than two of majors courses can apply (excluding prerequisite, liberal studies, cognate or college core courses) towards Minor.

Forensic Biosciences Minor

(1)

The goal of this interdisciplinary minor is to provide students with a broad-based understanding of the field of forensic biosciences. The minor allows students to gain both a deep understanding of a traditional discipline through their major field of study while gaining experience with various aspects of forensic biology and criminal investigations. It is not designed to provide students necessarily with the methods and measures of forensics, which

will come from student's undergraduate fields of study and/or future graduate study. The purpose is to give students an understanding of the basic issues and the applications of those methods within the context of forensic biology.

Foundation Courses: 12

(all majors)

- BIOL 107 - Introduction to Forensic Biology **Credits: 3**
- BIOL 211 - Investigative Biological Forensics **Credits: 3**
- BIOL 313 - Forensic Analysis of DNA **Credits: 3**
- CHEM 105 - The Forensic Chemistry of CSI **Credits: 3**

Required Course: 4

- BIOL 411 - Forensic Biology Laboratory Operations **Credits: 4**

Controlled Elective: 3-4

One course from the following:

- ANTH 488 - Geophysical Applications in Archaeology **Credits: 3**
- ANTH 491 - Zooarchaeology **Credits: 3**
- BIOL 103 - Life on Earth **Credits: 4**
- BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**
- BIOL 105 - Cell Biology **Credits: 3**
- BIOL 106 - Human Genetics and Health **Credits: 3**
- BIOL 115 - Biotic Diversity of North America **Credits: 3**
- BIOL 323 - Introduction to Toxicology and Risk Assessment **Credits: 3**
- BIOL 364 - Immunology **Credits: 3**
- BIOL 493 - Biology Internship **Credits: 3-12**
- PSYC 388 - Forensic Psychology **Credits: 3**

Total Minor Requirements: 19-20

(1) Must have formal Biology Department approval to be admitted to the minor in Forensic Biosciences.

Neurobiology Minor

Students who obtain a Neurobiology minor would be able to demonstrate knowledge of the neurobiological processes in animals and humans. This minor is an excellent option for students who are (i) planning to pursue advanced study in any of several fields related to neurobiology or neuroscience whether it be cognitive, behavioral, developmental, computational, molecular; or (ii) seeking relevant training for jobs related to the assessment, rehabilitation, and treatment of traumatic brain injury, brain diseases, and addiction. Additionally, this minor could also be attractive to psychology or other (Pre-) health majors.

Required Courses:

- BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**
or
- BIOL 240 - Human Physiology **Credits: 4**

- BIOL 477 - Neurobiology **Credits: 3**

Controlled Elective Courses: 12

(1)

BIOL 409 - Pharmacology Principles and Applications **Credits: 3**
BIOL 462 - Vertebrate Endocrinology **Credits: 3**
BIOL 469 - Circadian Rhythms and Sleep **Credits: 3**
BIOL 479 - Neurobiology of Addiction **Credits: 3**
BIOL 481 - Special Topics **Credits: 1-3 (2)**
PHIL 360 - Philosophy of Mind **Credits: 3**
PHIL 390 - Philosophy of Human Nature **Credits: 3**
PSYC 372 - Drugs and Behavior **Credits: 3**

Total Minor Requirements: 19

(1) At least 6cr should be from BIOL courses.

(2) Needs approval of department chair.

Wildlife and Conservation Biology Minor

The Wildlife and Conservation Biology minor is intended for students to gain knowledge and tools to study, conserve and understand the impact of habitat on wildlife species. This minor would be a perfect fit for a Pre-veterinary major as it would provide skills and career opportunities in government, private, academic institutions in the area of aquatic or wildlife sciences, ecological conservation or management, and education.

Required Courses:

BIOL 205 - Ecological Methods **Credits: 3**
BIOL 272 - Conservation of Plant and Animal Resources **Credits: 3**
BIOL 362 - Ecology **Credits: 3**

Controlled Electives:

(1,2)

BIOL 261 - Ornithology **Credits: 3**
BIOL 310 - Applied Entomology and Zoonoses **Credits: 3**
BIOL 352 - Comparative Animal Physiology **Credits: 3**
BIOL 425 - Herpetology **Credits: 3**
BIOL 431 - Ichthyology **Credits: 3**

BIOL 450 - Field Biology at Pymatuning Laboratory of Ecology **Credits: 4**
or
BIOL 490 - Field Studies in Biology **Credits: 1-4**

BIOL 451 - Evolutionary Biology **Credits: 3**
BIOL 455 - Animal Behavior **Credits: 3**
BIOL 475 - Mammalogy **Credits: 3**
BIOL 481 - Special Topics **Credits: 1-3**

Total Minor Requirements: 18-19

(1) Other appropriate BIOL courses at 200 level and above may be substituted on permission of the advisor and the Biology department chair in advance of taking the course.

(2) No more than two of major's courses can apply (excluding prerequisite, liberal studies, cognate or college core courses) towards minor.

Certificate and Certification Programs

Cell and Molecular Biology Certificate

For Biology majors and non-majors who wish to obtain specialized training in cell and molecular biology, the department offers a 16-credit sub-baccalaureate certificate program that consists of a five core Biology course sequence. Completion of the certificate will help to prepare students for positions in the modern biotechnology workforce. Applications are available at 114 Weyandt Hall. For more information, call 724-357-2352.

Core Courses: 16

- BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**
- BIOL 203 - Principles of Genetics and Development **Credits: 4**
- BIOL 331 - Developmental Biology **Credits: 3**
- BIOL 405 - The Biology of the Cell - Critical Thinking **Credits: 2**
- BIOL 430 - Gene Editing Tools in Medicine and Biotechnology **Credits: 3**

Total Certificate Requirements: 16

Other Degrees

Biology Honors Program

The honors program is open by departmental permission to all majors in the Department of Biology. Students who, by the end of the first semester of their sophomore year, have a minimum 3.25 cumulative GPA will be invited to apply for the program. The application will include a transcript and a personal statement outlining the student's academic plan, career goals, and why she or he wants to be considered for the honors program. A department honors committee (makeup to be determined by the department) will select a maximum of 12 students per year for the program.

Students accepted into the program will take BIOL 484 during the first semester of their junior year, two semesters of BIOL 483, and one 500- or 600-level BIOL course. The honors thesis will be based on research performed under the supervision of a department professor who specializes in the student's area of interest and must be approved by a thesis committee made up of the faculty member directing the student and two others, one of whom may come from outside the Department of Biology.

Students interested in the Biology Honors Program should discuss this opportunity with their advisors as early as possible so that they have achieved the necessary GPA and are prepared to make application for the program in the spring of their sophomore year. This program, though designed for all qualified students within the Department of Biology, should be of particular value to students intending to seek admission to graduate or professional schools. Honors course work is designated on university transcripts. Students completing the departmental honors program are recognized at departmental commencement ceremonies.

Required Courses:

- BIOL 484 - Honors Seminar **Credits: 2 (1)**
- BIOL 483 - Honors Thesis/Independent Study **Credits: 1-6 (1, 2)**
- BIOL 5XX/6XX - Graduate-level course **Credits: 3 (3)**

Total Honors Requirements: 9

(1) May be counted toward the BA, BS, and BSEd in Biology programs.

(2) Two semesters, 2cr each.

(3) Students must take one course at the 500/600 level during their junior or senior year. This will be in addition to the biology credits (currently 38 for all tracks) required for the major.

Chemistry

Websites: www.iup.edu/chemistry and www.iup.edu/biochemistry

Anne Kondo, Chair

Degree programs offered by the Department of Chemistry are the Bachelor of Science (BS) with a major in Chemistry or Biochemistry and the Bachelor of Science in Education (BSEd) with a major in Chemistry. Additionally, Pre-medical, Pre-pharmacy, and Interdisciplinary Tracks are available in the Chemistry BS program. Students majoring in Clinical Laboratory Science and preparatory programs for other professional schools can also be developed, using the Interdisciplinary Track, and a minor in Chemistry and Biochemistry are offered.

Bachelor of Science

Biochemistry, BS

Website: www.iup.edu/biochemistry

The four-year BS biochemistry and the minor are offered by the chemistry department.

The curriculum leading to a BS degree with a major in biochemistry begins with foundation courses in biology, chemistry, mathematics, and physics in the first two years. Specialization in biochemistry commences in the third year with courses in biochemistry, genetics, physical chemistry, special topics in biochemistry, and biochemistry seminar. Completion of one chemistry course as a controlled elective allows students the option to receive a biochemistry degree certified by the American Chemical Society.

A unique feature of this undergraduate program is that biochemistry research is a requirement. After consultation with faculty, the students will define a problem and devise an experimental plan through library research. Laboratory research will be done under the direct supervision of a faculty member. Finally, the student will report on the results of the research in both written and oral forms.

This program is intended for students whose interests lie in a most exciting field of modern science. Graduates can expect to be qualified to enter graduate programs in biochemistry, biology, chemistry, and molecular biology; professional schools in the health sciences; and positions in industrial and government research laboratories and in industrial production facilities.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3**

Natural Science:

PHYS 131 - Physics I-C Lecture **Credits: 3**

PHYS 141 - Physics I-C Lab **Credits: 1**

PHYS 132 - Physics II-C Lecture **Credits: 3**

PHYS 142 - Physics II-C Lab **Credits: 1**

Liberal Studies Elective: 3

MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3**

No courses with BIOC prefix

Major: 52

Required Courses:

BIOC 301 - Foundations of Biochemistry **Credits:** 3
BIOC 402 - Advanced Biochemistry **Credits:** 3
BIOC 311 - Biochemistry Laboratory I **Credits:** 1
BIOC 412 - Advanced Biochemistry Laboratory **Credits:** 1
BIOC 401 - Laboratory Methods in Biology and Biotechnology **Credits:** 3
BIOC 480 - Biochemistry Seminar I **Credits:** 1 (1)
BIOC 481 - Special Topics in Biochemistry **Credits:** 1-3
BIOC 482 - Independent Research in Biochemistry **Credits:** 1-3
BIOC 490 - Biochemistry Seminar II **Credits:** 1 (1)
BIOL 202 - Principles of Cell and Molecular Biology **Credits:** 4
BIOL 203 - Principles of Genetics and Development **Credits:** 4
BIOL 250 - Principles of Microbiology **Credits:** 4
CHEM 111 - General Chemistry I **Credits:** 4
or
CHEM 113 - Advanced General Chemistry I **Credits:** 4
CHEM 112 - General Chemistry II **Credits:** 4
or
CHEM 114 - Advanced General Chemistry II **Credits:** 4
CHEM 231 - Organic Chemistry I **Credits:** 4
CHEM 332 - Organic Chemistry II **Credits:** 4
CHEM 325 - Analytical Chemistry I **Credits:** 4
CHEM 341 - Physical Chemistry I **Credits:** 4

Controlled Electives: 6-8

Two courses chosen from any 300- or 400-level BIOC/BIOL/CHEM courses or

CHEM 314 - Inorganic Chemistry **Credits:** 4 (2)
MATH 216 - Probability and Statistics for Natural Sciences **Credits:** 3
or
MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits:** 3
or
COSC 110 - Problem Solving and Structured Programming **Credits:** 3

Free Electives: 16-18

Total Degree Requirements: 120

(1) 1cr each semester of senior year.

(2) CHEM 314 must be taken to qualify for an ACS certified degree

Chemistry, BS

Website: www.iup.edu/chemistry

Chemistry is a field that has historically enjoyed very strong career possibilities. Many students are employed directly after their undergraduate education by the chemical, pharmaceutical or related industries, in jobs that have excellent career prospects. Graduate school in chemistry or biochemistry usually includes very generous financial support, and can lead to outstanding career paths in industry, government or academic areas. These opportunities are available to students completing any of the degree programs offered by the Department of Chemistry, and graduates of these programs have gone on to industrial leadership positions, and some of the most prestigious graduate programs in the country.

The BS degree in Chemistry is designed for students intending a career in chemistry and is certified by the American Chemical Society. The advanced courses in the Chemistry BS reflect trends in the modern field of chemistry, and the requirements are flexible enough to allow students to tailor the degree program to their specific needs and interests. There is also a strong laboratory component in the Chemistry BS, which gives the student excellent hands on preparation for the challenges of employment or graduate school. An internship program with local chemical companies is available, and the credits from this internship can be counted to meet some of the program requirements.

The Chemistry BS degree is designed not only for traditional chemistry majors, but also for those students interested in cross-disciplinary fields that involve chemistry. Students intending to follow a dual-degree program should work with their Chemistry adviser, as courses from their other major can count for some of the requirements in the Chemistry BS degree.

Liberal Studies: 44-46

As outlined in Liberal Studies Requirements section with the following specifications:

Mathematics:

MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3**

Natural Science:

PHYS 111 - Physics I Lecture **Credits: 3**

PHYS 121 - Physics I Lab **Credits: 1**

and

PHYS 112 - Physics II Lecture **Credits: 3**

PHYS 122 - Physics II Lab **Credits: 1**

or

PHYS 131 - Physics I-C Lecture **Credits: 3**

PHYS 141 - Physics I-C Lab **Credits: 1**

and

PHYS 132 - Physics II-C Lecture **Credits: 3**

PHYS 142 - Physics II-C Lab **Credits: 1**

Liberal Studies Elective: 3

MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3**

Major: 55

Required Courses:

CHEM 111 - General Chemistry I **Credits: 4**

or

CHEM 113 - Advanced General Chemistry I **Credits: 4**

CHEM 112 - General Chemistry II **Credits: 4**

or

CHEM 114 - Advanced General Chemistry II **Credits: 4**

CHEM 314 - Inorganic Chemistry **Credits: 4**

CHEM 231 - Organic Chemistry I **Credits: 4**

CHEM 332 - Organic Chemistry II **Credits: 4**

CHEM 290 - Chemistry Seminar I **Credits: 1**

CHEM 325 - Analytical Chemistry I **Credits: 4**

CHEM 326 - Analytical Chemistry II **Credits: 4**

CHEM 341 - Physical Chemistry I **Credits: 4**
CHEM 442 - Advanced Physical Chemistry **Credits: 3**
CHEM 343 - Physical Chemistry Laboratory I **Credits: 1**
CHEM 444 - Advanced Physical Chemistry Laboratory **Credits: 1**
CHEM 390 - Chemistry Seminar II **Credits: 1**
CHEM 401 - Advanced Chemistry Lab **Credits: 4**
CHEM 411 - Advanced Inorganic Chemistry **Credits: 3**
CHEM 490 - Chemistry Seminar III **Credits: 1**
CHEM 498 - Problems in Chemistry **Credits: 1-2 (2)**
BIOC 301 - Foundations of Biochemistry **Credits: 3**

Controlled Electives: 9 (2,3)

At least 9cr additional from CHEM or BIOC at the 400 level

Math elective: 6

Two courses from the following:

MATH 171 - Introduction to Linear Algebra **Credits: 3**
MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**
MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits: 3**
MATH 341 - Differential Equations **Credits: 3**
MATH 342 - Advanced Mathematics for Applications **Credits: 4**
or
MATH 343 - Introduction to Numerical Methods **Credits: 3**

Other Requirements: 4

BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**
MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits: 3**

One Course from the Following:

MATH 171 - Introduction to Linear Algebra **Credits: 3**

MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**
or
MATH 341 - Differential Equations **Credits: 3**

Free Electives: 15-17

Total Degree Requirements: 120

- (1) Students are required to complete the DUCK exam during their last semester at IUP.
- (2) CHEM 493 Internship in Chemistry may be used to satisfy 3cr of controlled elective or 2cr of CHEM 498.
- (3) Additional courses may be counted for this requirement, with permission of advisor and department chair. Students who dual-major may count 400-level courses from their second major for at least some of this requirement.

Pre-medical Track, Chemistry, BS

The Pre-medical and Pre-pharmacy Tracks of the BS degree allow students to take all courses required for entrance into their intended professional health program and gives them the flexibility to tailor their program to meet their individual needs. Students in these tracks retain the option of: (a) attending medical or pharmacy school, (b) attending graduate school in chemistry, biochemistry, pharmacology, or a variety of medically-related PhD programs, (c) employment in the chemistry or pharmaceutical industry. Additionally, the flexibility of these tracks allows students to change the focus of their degree program during their undergraduate experience.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3 (1)**

Natural Science:

PHYS 111 - Physics I Lecture **Credits: 3**

PHYS 121 - Physics I Lab **Credits: 1**

PHYS 112 - Physics II Lecture **Credits: 3**

PHYS 122 - Physics II Lab **Credits: 1**

or

PHYS 131 - Physics I-C Lecture **Credits: 3**

PHYS 141 - Physics I-C Lab **Credits: 1**

PHYS 132 - Physics II-C Lecture **Credits: 3**

PHYS 142 - Physics II-C Lab **Credits: 1**

Philosophy or Religious Studies:

PHIL 122 - Contemporary Moral Issues **Credits: 3**

or

PHIL 130 - Introduction to Biomedical Ethics **Credits: 3**

Social Science:

(2, 3)

PSYC 101 - General Psychology **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

or

ANTH 110 - Contemporary Anthropology **Credits: 3**

or

ANTH 211 - Cultural Anthropology **Credits: 3**

Liberal Studies Elective: 3

MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3 (1)**

No course with CHEM prefix

Major: 49

Required Courses:

CHEM 111 - General Chemistry I **Credits:** 4
or
CHEM 113 - Advanced General Chemistry I **Credits:** 4
CHEM 112 - General Chemistry II **Credits:** 4
or
CHEM 114 - Advanced General Chemistry II **Credits:** 4
CHEM 314 - Inorganic Chemistry **Credits:** 4
CHEM 231 - Organic Chemistry I **Credits:** 4
CHEM 332 - Organic Chemistry II **Credits:** 4
CHEM 290 - Chemistry Seminar I **Credits:** 1
CHEM 325 - Analytical Chemistry I **Credits:** 4
CHEM 341 - Physical Chemistry I **Credits:** 4
CHEM 390 - Chemistry Seminar II **Credits:** 1
CHEM 490 - Chemistry Seminar III **Credits:** 1
CHEM 498 - Problems in Chemistry **Credits:** 1-2
BIOC 301 - Foundations of Biochemistry **Credits:** 3
BIOC 402 - Advanced Biochemistry **Credits:** 3

Controlled Electives:

At least 11 additional credits from the following: (2, 3, 4)

BIOC 311 - Biochemistry Laboratory I **Credits:** 1
BIOC 412 - Advanced Biochemistry Laboratory **Credits:** 1
BIOC 481 - Special Topics in Biochemistry **Credits:** 1-3
BIOL 150 - Human Anatomy **Credits:** 4
BIOL 240 - Human Physiology **Credits:** 4
BIOL 241 - Introductory Medical Microbiology **Credits:** 4
BIOL 250 - Principles of Microbiology **Credits:** 4
BIOL 331 - Developmental Biology **Credits:** 3
CHEM 326 - Analytical Chemistry II **Credits:** 4
CHEM 431 - Organic Molecular Structure Determination **Credits:** 3
CHEM 442 - Advanced Physical Chemistry **Credits:** 3
CHEM 343 - Physical Chemistry Laboratory I **Credits:** 1
CHEM 444 - Advanced Physical Chemistry Laboratory **Credits:** 1
CHEM 411 - Advanced Inorganic Chemistry **Credits:** 3
CHEM 481 - Special Topics **Credits:** 1-3
MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits:** 3

Other Requirements: 11

BIOL 202 - Principles of Cell and Molecular Biology **Credits:** 4
BIOL 203 - Principles of Genetics and Development **Credits:** 4
MATH 216 - Probability and Statistics for Natural Sciences **Credits:** 3

Free Electives: 16

Total Degree Requirements: 120

(1) For students transferring into the program, MATH 121 and MATH 122 may be substituted for MATH 125 and MATH 126, respectively.

(2) The application requirements of specific schools of medicine may result in the need to take additional courses. Students should be aware of the requirements at each program in which they are interested, and plan to take courses accordingly to meet these requirements.

(3) Students enrolled at an accredited school of medicine after three years at IUP may count the following toward the requirements for the Bachelor of Science–Chemistry/Pre-medical Track: 3cr of Liberal Studies social science; 11cr of required CHEM courses (see below); 13cr of free electives

(total 27cr). Upon completing the first year of medical school, students electing this option are not required to take CHEM 314, CHEM 325, and CHEM 341. If these CHEM courses are taken, they may be counted toward the controlled elective requirement.

(4) To qualify for an ACS-certified degree in chemistry, students must take BIOC 311, CHEM 343, and two courses from the following list:

BIOC 481 - Special Topics in Biochemistry **Credits:** 1-3
CHEM 326 - Analytical Chemistry II **Credits:** 4
CHEM 431 - Organic Molecular Structure Determination **Credits:** 3
CHEM 442 - Advanced Physical Chemistry **Credits:** 3

CHEM 411 - Advanced Inorganic Chemistry **Credits:** 3
or
CHEM 481 - Special Topics **Credits:** 1-3

Pre-pharmacy Track, Chemistry, BS

The Pre-medical and Pre-pharmacy Tracks of the BS degree allow students to take all courses required for entrance into their intended professional health program and gives them the flexibility to tailor their program to meet their individual needs. Students in these tracks retain the option of: (a) attending medical or pharmacy school, (b) attending graduate school in chemistry, biochemistry, pharmacology, or a variety of medically-related PhD programs, (c) employment in the chemistry or pharmaceutical industry. Additionally, the flexibility of these tracks allows students to change the focus of their degree program during their undergraduate experience.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits:** 3 (1)

Natural Science:

PHYS 111 - Physics I Lecture **Credits:** 3
PHYS 121 - Physics I Lab **Credits:** 1
PHYS 112 - Physics II Lecture **Credits:** 3
PHYS 122 - Physics II Lab **Credits:** 1
or
PHYS 131 - Physics I-C Lecture **Credits:** 3
PHYS 141 - Physics I-C Lab **Credits:** 1
PHYS 132 - Physics II-C Lecture **Credits:** 3
PHYS 142 - Physics II-C Lab **Credits:** 1

Philosophy or Religious Studies:

PHIL 122 - Contemporary Moral Issues **Credits:** 3
or
PHIL 130 - Introduction to Biomedical Ethics **Credits:** 3

Social Science:

PSYC 101 - General Psychology **Credits:** 3
ECON 101 - Basic Economics **Credits:** 3 (2, 3)
or

ECON 121 - Principles of Macroeconomics **Credits:** 3 (2, 3)

Liberal Studies Elective: 3

MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits:** 3 (1)
No course with CHEM prefix

Major: 49

Required Courses:

CHEM 111 - General Chemistry I **Credits:** 4
or
CHEM 113 - Advanced General Chemistry I **Credits:** 4
CHEM 112 - General Chemistry II **Credits:** 4
or
CHEM 114 - Advanced General Chemistry II **Credits:** 4
CHEM 314 - Inorganic Chemistry **Credits:** 4 (3)
CHEM 231 - Organic Chemistry I **Credits:** 4
CHEM 332 - Organic Chemistry II **Credits:** 4
CHEM 290 - Chemistry Seminar I **Credits:** 1
CHEM 325 - Analytical Chemistry I **Credits:** 4 (3)
CHEM 341 - Physical Chemistry I **Credits:** 4 (3)
CHEM 390 - Chemistry Seminar II **Credits:** 1
CHEM 490 - Chemistry Seminar III **Credits:** 1

Controlled Electives: 19

(2, 3, 4)

At least 19cr, consisting of:

BIOC 301 - Foundations of Biochemistry **Credits:** 3
and
BIOC 402 - Advanced Biochemistry **Credits:** 3
or
CHEM 351 - Biochemistry **Credits:** 4

Courses from the Following:

BCOM 321 - Business and Interpersonal Communications **Credits:** 3
or
ENGL 310 - Public Speaking **Credits:** 3
BIOC 311 - Biochemistry Laboratory I **Credits:** 1
BIOC 412 - Advanced Biochemistry Laboratory **Credits:** 1
BIOC 481 - Special Topics in Biochemistry **Credits:** 1-3
BIOL 150 - Human Anatomy **Credits:** 4
BIOL 240 - Human Physiology **Credits:** 4
BIOL 241 - Introductory Medical Microbiology **Credits:** 4
BIOL 250 - Principles of Microbiology **Credits:** 4
CHEM 326 - Analytical Chemistry II **Credits:** 4
CHEM 431 - Organic Molecular Structure Determination **Credits:** 3
CHEM 442 - Advanced Physical Chemistry **Credits:** 3

CHEM 343 - Physical Chemistry Laboratory I **Credits:** 1
CHEM 444 - Advanced Physical Chemistry Laboratory **Credits:** 1
CHEM 411 - Advanced Inorganic Chemistry **Credits:** 3
CHEM 481 - Special Topics **Credits:** 1-3
CHEM 498 - Problems in Chemistry **Credits:** 1-2
MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits:** 3

Other Requirements: 11

BIOL 202 - Principles of Cell and Molecular Biology **Credits:** 4
BIOL 203 - Principles of Genetics and Development **Credits:** 4
MATH 216 - Probability and Statistics for Natural Sciences **Credits:** 3

Free Electives: 16

(2, 3)

Total Degree Requirements: 120

(1) For students transferring into the program, MATH 121 and MATH 122 may be substituted for MATH 125 and MATH 126, respectively.

(2) The application requirements of specific schools of pharmacy may result in the need to take additional courses. Students should be aware of the requirements at each program in which they are interested, and plan to take courses accordingly to meet these requirements.

(3) Students enrolled at an accredited school of pharmacy after three years at IUP may count the following toward the requirements for the Bachelor of Science–Chemistry/Pre-pharmacy Track: 3cr of Liberal Studies social science; 11cr of required CHEM courses (see below); 13cr of free electives (total 27cr). Upon completing the first year of pharmacy school, students electing this option are not required to take CHEM 314, CHEM 325, and CHEM 341. If these CHEM courses are taken, they may be counted toward the controlled elective requirement.

(4) To qualify for an ACS-certified degree in chemistry, students must take BIOC 311 and CHEM 498. Additionally, they must take three lecture courses and one lab course from the following list:

BIOC 402 - Advanced Biochemistry **Credits:** 3
BIOC 412 - Advanced Biochemistry Laboratory **Credits:** 1
BIOC 481 - Special Topics in Biochemistry **Credits:** 1-3
CHEM 326 - Analytical Chemistry II **Credits:** 4 (Counts as both a lecture and a lab course)
CHEM 431 - Organic Molecular Structure Determination **Credits:** 3
CHEM 442 - Advanced Physical Chemistry **Credits:** 3
CHEM 343 - Physical Chemistry Laboratory I **Credits:** 1
CHEM 411 - Advanced Inorganic Chemistry **Credits:** 3 (Counts as both a lecture and a lab course)
CHEM 481 - Special Topics **Credits:** 1-3

Bachelor of Science in Education

Chemistry, BSED

See requirement leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 44

As outlined in Liberal Studies Requirements section with the following specifications:

Mathematics:

MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3**

Natural Science:

PHYS 111 - Physics I Lecture **Credits: 3**

PHYS 121 - Physics I Lab **Credits: 1**

PHYS 112 - Physics II Lecture **Credits: 3**

PHYS 122 - Physics II Lab **Credits: 1**

or

PHYS 131 - Physics I-C Lecture **Credits: 3**

PHYS 141 - Physics I-C Lab **Credits: 1**

PHYS 132 - Physics II-C Lecture **Credits: 3**

PHYS 142 - Physics II-C Lab **Credits: 1**

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Elective: 3

MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3**

No course with CHEM prefix

College: 31

Preprofessional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits: 3**

EDSP 102 - Educational Psychology **Credits: 3**

Professional Education Sequence:

EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits: 2**

EDEX 323 - Instruction of English Language Learners with Special Needs **Credits: 2**

EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**

EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**

EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**

EDUC 441 - Student Teaching **Credits: 5-12**

EDUC 442 - School Law **Credits: 1**

EDUC 451 - Teaching Science in the Secondary School **Credits: 3**

Major: 36-37

Required Courses:

CHEM 111 - General Chemistry I **Credits: 4**

or

CHEM 113 - Advanced General Chemistry I **Credits: 4**

CHEM 112 - General Chemistry II **Credits: 4**

or

CHEM 114 - Advanced General Chemistry II **Credits:** 4
CHEM 314 - Inorganic Chemistry **Credits:** 4
CHEM 231 - Organic Chemistry I **Credits:** 4
CHEM 332 - Organic Chemistry II **Credits:** 4
CHEM 325 - Analytical Chemistry I **Credits:** 4
CHEM 341 - Physical Chemistry I **Credits:** 4
CHEM 343 - Physical Chemistry Laboratory I **Credits:** 1
CHEM 390 - Chemistry Seminar II **Credits:** 1 (1)
CHEM 498 - Problems in Chemistry **Credits:** 1-2 (1, 2)

Controlled Electives:

(2)

BIOC 301 - Foundations of Biochemistry **Credits:** 3

or

CHEM 351 - Biochemistry **Credits:** 4

- At least 3cr additional CHEM or BIOC at or above the 300 level

Other Requirements: 8

- BIOL 202 - Principles of Cell and Molecular Biology **Credits:** 4
- GEOS 201 - Foundations of Geology **Credits:** 4

Free Electives: 0-1

(1)

Total Degree Requirements: 120

(1) Program contains one writing-intensive course (CHEM 343); students need to acquire another W-course in Liberal Studies or as an elective.

(2) Students in the Chemistry Education program who wish to earn an ACS-certified degree in chemistry must take 2cr of CHEM 498, including a written report, and complete at least 7cr, including two lab courses, of CHEM or BIOC at or above the 300 level.

Minor

Biochemistry Minor

Total credits will depend on the controlled electives used (9cr minimum required to 12cr for three 4cr electives).

Required Courses: 8

- BIOC 301 - Foundations of Biochemistry **Credits:** 3 (1a)
- BIOC 402 - Advanced Biochemistry **Credits:** 3
- BIOC 311 - Biochemistry Laboratory I **Credits:** 1 (1a)
- BIOC 412 - Advanced Biochemistry Laboratory **Credits:** 1

Other Requirements: 10-12

At least three controlled electives from following: (1)

- BIOC 480 - Biochemistry Seminar I **Credits:** 1
- BIOC 481 - Special Topics in Biochemistry **Credits:** 1-3
- BIOC 490 - Biochemistry Seminar II **Credits:** 1
- BIOL 203 - Principles of Genetics and Development **Credits:** 4 (1b)
- BIOL 250 - Principles of Microbiology **Credits:** 4 (1b, d)
- BIOL 352 - Comparative Animal Physiology **Credits:** 3 (1d)
- BIOL 364 - Immunology **Credits:** 3 (1d)
- BIOC 401 - Laboratory Methods in Biology and Biotechnology **Credits:** 3 (1d)
or
- BIOL 401 - Laboratory Methods in Biology and Biotechnology **Credits:** 3 (1d)
- CHEM 332 - Organic Chemistry II **Credits:** 4 (1c)
- CHEM 332 - Organic Chemistry II **Credits:** 4 (1c, d)
- CHEM 325 - Analytical Chemistry I **Credits:** 4

Total Minor Requirements: 18-20

(1) Or other 200-level or higher biology or chemistry courses with permission of chairperson of offering department. A minimum of 10cr is required.

- BIOL 202 and CHEM 332 are prerequisites.
- Required for biology major
- Required for chemistry major
- These courses have prerequisites not needed for the required courses.

Chemistry Minor

Required Courses:

- CHEM 111 - General Chemistry I **Credits:** 4
or
- CHEM 113 - Advanced General Chemistry I **Credits:** 4
- CHEM 112 - General Chemistry II **Credits:** 4
or
- CHEM 114 - Advanced General Chemistry II **Credits:** 4
- CHEM 231 - Organic Chemistry I **Credits:** 4

At Least 7cr from the Following:

- CHEM 314 - Inorganic Chemistry **Credits:** 4
- CHEM 332 - Organic Chemistry II **Credits:** 4
or
- Any CHEM or BIOC course(s) at the 300 level or above

Total Minor Requirements: 19

Certificate and Certification Programs

Chemistry Honors, Certificate

Liberal Studies: 14

As outlined in the Liberal Studies Requirements section with the following specifications:

Mathematics:

- MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3**

Natural Science:

- PHYS 131 - Physics I-C Lecture **Credits: 3**
- PHYS 141 - Physics I-C Lab **Credits: 1**
and
- PHYS 132 - Physics II-C Lecture **Credits: 3**
- PHYS 142 - Physics II-C Lab **Credits: 1**

Liberal Studies Electives: 3

- MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3**

Core Courses: 9

- CHEM 442 - Advanced Physical Chemistry **Credits: 3**
(2)
- CHEM 498 - Problems in Chemistry **Credits: 1-2**
- MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits: 3**

Elective Course: 3

- MATH 171 - Introduction to Linear Algebra **Credits: 3**
or any BIOL, COSC, GEOS, MATH or PHYS course at the 300-level or above (3)

Total Certificate Requirements: 26

(1) Honors certificate also requires a presentation of research during departmental seminar.

(2) Meets 3cr of CHEM controlled elective.

(3) This requirement may also be met by taking an additional 3cr at the 400-level in CHEM or BIOC.

Geoscience

Website: www.iup.edu/geoscience

Nicholas D. Deardorff, Chair

Geology is the broad science that encompasses all aspects of the Earth system. In addition to the solid Earth, this system includes the oceans and atmosphere, climate change, and most aspects of our immediate environment. Professional geologists are thus engaged in a wide range of activities, depending on their interests. Scientific questions addressed by geologists include the evolution of life, the origin of volcanic activity, the assessment of volcanic and earthquake hazards, the evolution of our planetary neighbors, climate change, mineral and energy resources, and the human impact on the environment.

The Geoscience Department offers a Bachelor of Science degree that gives students the necessary foundation to pursue a wide variety of career goals. In addition, the department offers a Bachelor of Science in Education degree with a major in Earth and space science education for students who are interested in teaching. The degrees and courses in the program emphasize hands-on learning, including

outdoor instruction, student-oriented research, and professional experiential learning opportunities. In addition to on-campus instruction and class-related field trips, the department also offers several regional geology field workshops, which take place in Newfoundland, Colorado, Florida, and the American Southwest.

Students complete a set of core foundational geoscience coursework that provides a basis for understanding concepts used for a variety of subdisciplines including oceanography/marine geology, climate change, volcanology, paleontology, astronomy and geophysics. Working closely with academic advisors, students also select a series of coursework tailored specifically to meet individual career goals that include professional teaching certification, research and graduate studies, or working as professional geologists for energy resource companies, environmental consulting firms, or federal and state regulatory agencies.

Bachelor of Science

Geology, BS

Geology is the broad science that encompasses all aspects of the Earth system. In addition to the solid Earth, this system includes the oceans and atmosphere, climate change, and most aspects of our immediate environment. Professional geologists are thus engaged in a wide range of activities, depending on their interests. Scientific questions addressed by geologists include the evolution of life, the origin of volcanic activity, the assessment of volcanic and earthquake hazards, the evolution of our planetary neighbors, climate change, mineral and energy resources, and the human impact on the environment. The Geoscience Department offers a BS degree that gives students the necessary foundation to pursue a wide variety of career goals. In addition, the department offers a BSEd degree with a major in Earth and Space Science Education (ESPE) for students who are interested in teaching. The degrees and courses in the program emphasize hands-on learning, including outdoor instruction, student-oriented research, and professional experiential learning opportunities. In addition to on-campus instruction and class-related field trips, the department also offers several regional geology field workshops, which take place in Newfoundland, Colorado, Florida, and the American Southwest.

Students complete a set of core foundational geoscience coursework that provides a basis for understanding concepts used for a variety of subdisciplines including oceanography/marine geology, climate change, volcanology, paleontology, astronomy and geophysics. Working closely with academic advisors, students also select a series of coursework tailored specifically to meet individual career goals that include professional teaching certification, research and graduate studies, or working as professional geologists for energy resource companies, environmental consulting firms, or federal and state regulatory agencies.

Liberal Studies: 44-46

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

- MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**
or
- MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3**

Natural Science:

- CHEM 111 - General Chemistry I **Credits: 4**
- CHEM 112 - General Chemistry II **Credits: 4**
or
- CHEM 113 - Advanced General Chemistry I **Credits: 4**
- CHEM 114 - Advanced General Chemistry II **Credits: 4**

Liberal Studies Elective: 3-4

- MATH 122 - Calculus II for Natural and Social Sciences **Credits: 4**
or

- MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3**

Major: 58

Required Courses:

- GEOS 201 - Foundations of Geology **Credits: 4**
- GEOS 203 - Surficial Processes **Credits: 4**
- GEOS 204 - Historical Geology **Credits: 4**
- GEOS 301 - Mineralogy **Credits: 4**
- GEOS 302 - Structural Geology **Credits: 4**
- GEOS 470 - Research Planning **Credits: 2**
- GEOS 475 - Data Interpretation **Credits: 2**
- GEOS 480 - Senior Research **Credits: 2**

One Course from the Following: 4

(1)

- GEOS 303 - Field Geology **Credits: 4**

- GEOS 401 and
• GEOS 402

- GEOS 403
and
• GEOS 404 - Newfoundland Field Workshop **Credits: 3**

- GEOS 405 - American Southwest Seminar **Credits: 1**
and
• GEOS 406 - American Southwest Field Workshop **Credits: 3**
- GEOS 407 - Carbonate Geology Seminar **Credits: 1**
and
• GEOS 408 - Carbonate Geology Field Workshop **Credits: 3**

- GEOS 490 - Field Studies in Geology **Credits: 1-4**

Ancillary Sciences: 6

Select two courses from the following:

- PHYS 111 - Physics I Lecture **Credits: 3**
or
- PHYS 131 - Physics I-C Lecture **Credits: 3**
- PHYS 112 - Physics II Lecture **Credits: 3**
or
- PHYS 132 - Physics II-C Lecture **Credits: 3**
- MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**
or
- MATH 217 - Probability and Statistics **Credits: 3**

Controlled Electives: 22

Select 22cr from the following: (2)

- One 100-level GEOS course (3)
- Any 300-level GEOS course(s)
- Any 400-level GEOS course(s)

Students interested in pursuing a more generalized career in **Geology** or considering graduate school are encouraged to take three from the following: GEOS 323, GEOS 345, GEOS 352, GEOS 353, GEOS 355, GEOS 362, GEOS 481 (with departmental approval)

Students interested in **Environmental Geosciences** are encouraged to take three from the following: GEOS 310, GEOS 311, GEOS 312, GEOS 323, GEOS 352, GEOS 356, GEOS 481 (with departmental approval)

Students interested in careers in **Energy** are encouraged to take three from the following: GEOS 323, GEOS 324, GEOS 352, GEOS 353, GEOS 355, GEOS 481 (with departmental approval)

- Foreign Language Intermediate Level
- BIOL 201 - Principles of Ecology and Evolution **Credits: 4**
- BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**
- BIOL 221 - Environmental Health and Protection **Credits: 4**
- CHEM 231 - Organic Chemistry I **Credits: 4**
- CHEM 325 - Analytical Chemistry I **Credits: 4**
- CHEM 326 - Analytical Chemistry II **Credits: 4**
- CHEM 332 - Organic Chemistry II **Credits: 4**
- CHEM 341 - Physical Chemistry I **Credits: 4**
- COSC 110 - Problem Solving and Structured Programming **Credits: 3**
- COSC 210 - Object-Oriented and GUI Programming **Credits: 3**
- COSC 310 - Data Structures and Algorithms **Credits: 3**
- COSC 341 - Introduction to Database Management Systems **Credits: 3**
- COSC 362 - Unix Systems **Credits: 3**

- COSC 343 - Introduction to Numerical Methods **Credits: 3**
or
- MATH 343 - Introduction to Numerical Methods **Credits: 3**

- ENVE 101 - Introduction to Environmental Engineering **Credits: 3**
- GEOG 316 - Introduction to Geographic Information Systems **Credits: 3**
- GEOG 335
- GEOG 341 - Climatology **Credits: 3**
- GEOG 343 - Fresh Water Resources **Credits: 3**
- GEOG 415 - Introduction to Remote Sensing **Credits: 3**
- GEOG 419 - Geographic Information Systems (GIS) for Environmental Applications **Credits: 3**
- GEOG 435 - Geography of Energy **Credits: 3**
- IFMG 390 - Database Theory and Practice **Credits: 3**

- MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**
or
- MATH 217 - Probability and Statistics **Credits: 3 (4)**
- MATH 341 - Differential Equations **Credits: 3**

- PHYS 121 - Physics I Lab **Credits: 1**
or
- PHYS 141 - Physics I-C Lab **Credits: 1**
- PHYS 122 - Physics II Lab **Credits: 1**
or
- PHYS 142 - Physics II-C Lab **Credits: 1**
- PHYS 342 - Thermal and Statistical Physics **Credits: 3**

Free Electives: 16-18

Total Degree Requirements: 120

(1) Up to 4cr of a summer field camp, internship, field study, or independent study, if approved by the department, may substitute for GEOS 303 or a Geoscience Field Workshop.

(2) No more than 12cr of Controlled Electives may be fulfilled by non-GEOS classes. Only one Geoscience Field Workshop (including prerequisite 1cr Seminar) may be applied toward controlled electives. Six credits of foreign language may count toward controlled electives provided intermediate level is successfully obtained.

(3) When taken before declaring the major or when specially recommended during freshman orientation/transfer advising for students who must take remedial math courses before enrolling in GEOS 201.

(4) Cannot be counted as a controlled elective if MATH 216 is applied toward ancillary science requirements.

Bachelor of Science in Education

Earth and Space Science, BSED

This program prepares students to become certified middle- and high-school teachers in Pennsylvania and other states. Earth and space science teachers in grades 7 to 12 teach subjects that require a broad and solid foundation in science. Course work includes study of geology, meteorology, oceanography, and astronomy. A basic understanding of the cognate sciences, biology, chemistry, and physics, and mathematics is also an essential part of the major. Courses in the foundations of education and pedagogy complement the subject matter studies. Students create and present lessons, first in their courses and then in school classrooms, culminating in the student teaching experience in the final semester.

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

- MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**

Natural Science:

- CHEM 111 - General Chemistry I **Credits: 4**
- CHEM 112 - General Chemistry II **Credits: 4**

Social Science:

- PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 6

- MATH 217 - Probability and Statistics **Credits: 3**
- PHYS 111 - Physics I Lecture **Credits: 3**
- No courses with GEOS prefix

College: 31

Preprofessional Education Sequence:

- ACE 103 - Digital Instructional Technology **Credits: 3**
- EDSP 102 - Educational Psychology **Credits: 3**

Professional Education Sequence:

- EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits: 2**
- EDEX 323 - Instruction of English Language Learners with Special Needs **Credits: 2**
- EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**
- EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**
- EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**
- EDUC 441 - Student Teaching **Credits: 5-12**
- EDUC 442 - School Law **Credits: 1**
- EDUC 451 - Teaching Science in the Secondary School **Credits: 3**

Major: 39

Required Courses:

- BIOL 201 - Principles of Ecology and Evolution **Credits: 4**
- GEOS 201 - Foundations of Geology **Credits: 4**
- GEOS 202 - Quantitative Methods in the Geoscience **Credits: 2**
- GEOS 341 - Planetary Geology **Credits: 4**
- GEOS 342 - Stellar Astronomy **Credits: 4**
- GEOS 353 - Paleontology **Credits: 4**
- GEOS 370 - Oceanography **Credits: 4**
- GEOS 371 - Meteorology **Credits: 3**
- PHYS 121 - Physics I Lab **Credits: 1**

Controlled Electives: 9

Select 9cr from the following:

- GEOS 203 - Surficial Processes **Credits: 4**
- Any 300-level GEOS course
- Any 400-level GEOS course, except GEOS 470 and GEOS 480
- PHYS 112 - Physics II Lecture **Credits: 3**
- PHYS 122 - Physics II Lab **Credits: 1**

Free Electives: 2

Total Degree Requirements: 120

Minor

Geology Minor

The minor in geology is designed for students who want a background in geology in conjunction with their main area of study. This minor may be particularly appropriate for students pursuing degrees in business or one of the social or physical sciences.

Required Introductory Course: 4

- GEOS 201 - Foundations of Geology **Credits:** 4

Controlled Elective Courses: 14

(1) (2) Any GEOS course 200-level or above, except GEOS 470, GEOS 475, and GEOS 480.

Total Minor Requirements: 18

- (1) At least 6cr must be 300-level or higher.
- (2) Only one Geoscience Field Workshop (including prerequisite Seminar) can be counted toward the minor.

Mathematical and Computer Sciences

Website: www.iup.edu/math-computer-sciences

Francisco E. Alarcón, Chair

The Department of Mathematical and Computer Sciences prepares students for work in business, industry, government, teaching, and graduate school. Degree programs offered by the department span a variety of bachelor's degrees in Computer Science, Mathematics, and Mathematics Education with minors in computer science, cyber security, mathematics, elementary and middle-level mathematics, and applied statistics. Undergraduates can also pursue 4+1 programs and early admission to graduate work in the master's level offerings from the department.

Programs include:

Bachelor of Arts

- Computer Science, BA

Bachelor of Science

- Actuarial Track, Mathematics, BS
- Applied Mathematics Track, Mathematics, BS
- Cyber Security Track, Computer Science, BS
- Languages and Systems Track, Computer Science, BS
- Mathematics, BS
- Software Engineering Track, Computer Science, BS

Bachelor of Science in Education

- Mathematics Education, BSED

Minor

- Applied Statistics Minor
- Computer Science Minor
- Cyber Security Minor
- Elementary and Middle-Level Mathematics Minor
- Mathematics Minor

Bachelor of Arts

Computer Science, BA

IUP's computer science programs share a curricular core covering fundamental concepts, programming, problem solving, data structures, algorithms, software engineering, database, and seminars on technical topics and the profession. The department focuses on providing a broad foundation to create agile graduates who can adapt to the rapidly changing trends in the computer science field. Upper-level courses are designed to provide depth of theory and build career skills. Courses held in computer classrooms offer hands-on learning that blends theory with supervised practice to train workforce ready graduates. The Bachelor of Arts in Computer Science program allows greater flexibility by having fewer required courses. Students often choose this track when planning to double major or if they want to tailor their degree program meet specific interests. Graduates leverage their wide scope of knowledge by applying computing skills to fields outside of computer science and are effective in communicating across disciplines and cultural backgrounds.

Students completing the program are prepared to work in computer-dependent areas of business, government, and industry. Recent graduates have started their careers with positions in programming and systems analysis, business applications, computer software development, applied scientific programming, and other computer-related areas.

Liberal Studies: 43-44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

- MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3 (1)**

Liberal Studies Elective: 3

- MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**
- No courses with COSC prefix

Major: 39

Core Courses:

- COSC 105 - Fundamentals of Computer Science **Credits: 3**
- COSC 110 - Problem Solving and Structured Programming **Credits: 3**
- COSC 210 - Object-Oriented and GUI Programming **Credits: 3**
- COSC 220 - Applied Computer Programming **Credits: 4**
- COSC 300 - Computer Organization and Assembly Language **Credits: 3**
- COSC 310 - Data Structures and Algorithms **Credits: 3**
- COSC 341 - Introduction to Database Management Systems **Credits: 3**
- COSC 380 - Seminar on the Computer Profession and Ethics **Credits: 2**
- COSC 480 - Seminar on Technical Topics **Credits: 1**

Controlled Electives:

8cr from the following: (2)

- COSC 343 - Introduction to Numerical Methods **Credits: 3**
or
- MATH 343 - Introduction to Numerical Methods **Credits: 3**

- COSC 216 - Introduction to Cyber Security **Credits: 3 (3)**
- COSC 319 - Software Engineering Concepts **Credits: 3**
- COSC 345 - Computer Networks **Credits: 3**
- COSC 355 - Computer Graphics **Credits: 3**
- COSC 356 - Network Security **Credits: 3**

- COSC 362 - Unix Systems **Credits: 3**
- COSC 365 - Web Architecture and Application Development **Credits: 3**
- COSC 473 - Software Engineering Practice **Credits: 3 (4)**
- COSC 482 - Independent Study **Credits: 1-4**
- COSC 493 - Internship in Computer Science **Credits: 6-12 (4)**
- COSC 354
or
- IFMG 354

- IFMG 455 - Business Data Mining **Credits: 3**

Upper-Level Electives by Categories: 6

(5)

Artificial Intelligence:

- COSC 405 - Artificial Intelligence **Credits: 3**

Computer Architecture:

- COSC 410 - Computer Architecture **Credits: 3**

Database Management:

- COSC 444

Distributed Systems:

- COSC 465 - Distributed Processing and Web Services **Credits: 3**

Numerical Methods:

- COSC 427 - Introduction to Cryptography **Credits: 3**

Systems Programming:

- COSC 430 - Introduction to Systems Programming **Credits: 3**
- COSC 432 - Introduction to Operating Systems **Credits: 3**

Theory of Languages:

- COSC 420 - Modern Programming Languages **Credits: 3**
- COSC 424 - Compiler Construction **Credits: 3**
- COSC 460 - Theory of Computation **Credits: 3**

Other Requirements: 3

Additional Mathematics:

- MATH 309 - Discrete Mathematics **Credits: 3**

Free Electives: 34-35

Total Degree Requirements: 120

(1) MATH 125 can be substituted by MATH 121.

(2) Upper-level electives may be counted as controlled electives. 3cr of Intermediate Level foreign language may be applied toward controlled electives.

(3) COSC 216 cannot be counted for major credit if a student does a Cyber Security minor.

(4) Credit for both COSC 473 and COSC 493 may be counted toward the degree, but only one will be counted toward the major requirements. **Note:** Only 3cr of first 6cr of COSC 493 or 6cr of a total 12cr of COSC 493 can be counted toward major. COSC 493 may be selected after completion of sophomore year.

(5) Select at least two additional courses, from at least two different categories, from the list of upper-level electives.

Bachelor of Science

Actuarial Track, Mathematics, BS

The program for a mathematics major in the Kopchick College of Natural Sciences and Mathematics has three options. A student may pursue a degree with a major in mathematics or a degree with a major in mathematics with a concentration in either applied mathematics or actuarial science. Those completing a degree with a major in mathematics will be prepared to continue their studies in mathematics in graduate school, though some may enter business, industry, or government service. Students receiving a mathematics degree with a concentration in applied mathematics will be primarily prepared to enter business, industry, or government service in an area where mathematics or computer science is used, or to continue their studies in applied mathematics or computer science in graduate school. Students in the actuarial science concentration take additional course work in finance and economics, preparing them to complete the first two professional actuarial exams and to pursue employment in the areas of insurance and investment.

(1, 2)

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

- MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3**

Social Science:

- ECON 121 - Principles of Macroeconomics **Credits: 3**

Liberal Studies Elective: 6

- No courses with MATH Prefix, intermediate-level foreign language and ECON 122 are required

Major: 49

Required Courses:

- MATH 111 - First-year Seminar **Credits: 1**
- MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3**
- MATH 171 - Introduction to Linear Algebra **Credits: 3**
- MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**
- MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits: 3**
- MATH 271 - Introduction to Mathematical Proofs I **Credits: 3**
- MATH 272 - Introduction to Mathematical Proofs II **Credits: 3**
- MATH 341 - Differential Equations **Credits: 3**
- MATH 363 - Mathematical Statistics I **Credits: 3**
- MATH 364 - Mathematical Statistics II **Credits: 3**
- MATH 448 - Introduction to Financial Mathematics **Credits: 3**
- MATH 450 - Topics in Applied Computational Mathematics **Credits: 3**

Controlled Electives:

- COSC 343 - Introduction to Numerical Methods **Credits: 3**
or
- MATH 343 - Introduction to Numerical Methods **Credits: 3**
- MATH 416 - Time Series Analysis **Credits: 3**

One Course from the Following:

- MATH 371 - Linear Algebra **Credits: 3**
- MATH 421 - Advanced Calculus I **Credits: 3**
- MATH 423 - Complex Variables **Credits: 3**

One Course from the Following:

- MATH 445 - Deterministic Models in Operations Research **Credits: 3**
- MATH 446 - Probabilistic Models in Operations Research **Credits: 3**

One Course from the Following:

- MATH 480 - Senior Seminar **Credits: 3**
- MATH 493 - Internship in Mathematics **Credits: 3-12 (3)**

Other Requirements: 6

- ECON 356 - Introduction to Econometrics **Credits: 3 (4)**
- FIN 320 - Corporate Finance **Credits: 3 (4)**

Free Electives: 18-19

Total Degree Requirements: 120

(1) Pass SOA Exam P or Exam FM.

(2) "B" or higher grades in course work that carries Validation by Educational Experience (VEE) from the Society of Actuaries (required for SOA credential).

(3) Three credits of internship will be applied to the major. Additional credits may count as free electives.

(4) FIN 320 and ECON 356 must be passed with grade of "B" or better.

Applied Mathematics Track, Mathematics, BS

The program for a mathematics major in the Kopchick College of Natural Sciences and Mathematics has three options. A student may pursue a degree with a major in mathematics or a degree with a major in mathematics with a concentration in either applied mathematics or actuarial science. Those completing a degree with a major in mathematics will be prepared to continue their studies in mathematics in graduate school, though some may enter business, industry, or government service. Students receiving a mathematics degree with a concentration in applied mathematics will be primarily prepared to enter business, industry, or government service in an area where mathematics or computer science is used, or to continue their studies in applied mathematics or computer science in graduate school. Students in the actuarial science concentration take additional course work in finance and economics, preparing them to complete the first two professional actuarial exams and to pursue employment in the areas of insurance and investment.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

- MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3**

Liberal Studies Electives: 6

- No courses with MATH prefix, includes intermediate-level foreign language

Major: 43

Required Courses:

- MATH 111 - First-year Seminar **Credits: 1**
- MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3**
- MATH 171 - Introduction to Linear Algebra **Credits: 3**
- MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**
- MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits: 3**
- MATH 271 - Introduction to Mathematical Proofs I **Credits: 3**
- MATH 272 - Introduction to Mathematical Proofs II **Credits: 3**
- MATH 341 - Differential Equations **Credits: 3**
- MATH 363 - Mathematical Statistics I **Credits: 3**
- MATH 447 - Modeling and Simulation **Credits: 3**
- MATH 450 - Topics in Applied Computational Mathematics **Credits: 3**

Controlled Electives:

(1)

One Course from the Following:

- MATH 342 - Advanced Mathematics for Applications **Credits: 4**
- MATH 364 - Mathematical Statistics II **Credits: 3**
- MATH 445 - Deterministic Models in Operations Research **Credits: 3**
- MATH 446 - Probabilistic Models in Operations Research **Credits: 3**

One Course from the Following:

- MATH 371 - Linear Algebra **Credits: 3**
- MATH 421 - Advanced Calculus I **Credits: 3**
- MATH 423 - Complex Variables **Credits: 3**
- MATH 427 - Introduction to Topology **Credits: 3**
- MATH 476 - Abstract Algebra I **Credits: 3**

One Course from the Following:

- MATH 445 - Deterministic Models in Operations Research **Credits: 3**
- MATH 446 - Probabilistic Models in Operations Research **Credits: 3**

One Course from the Following:

- MATH 480 - Senior Seminar **Credits: 3**
- MATH 493 - Internship in Mathematics **Credits: 3-12 (2)**

Other Requirements: 17

- Planned program in a complementary field: requires advisor approval and at least 6cr in courses at the 300 level or above. **Credits: 11**

Computer Science:

- COSC 110 - Problem Solving and Structured Programming **Credits: 3**
- COSC 343 - Introduction to Numerical Methods **Credits: 3**
or
- MATH 343 - Introduction to Numerical Methods **Credits: 3**

Free Electives: 13-14

Total Degree Requirements: 120

(1) A student may select courses for a specialized area: Statistics/Actuarial Science: MATH 363, MATH 364, MATH 371, MATH 446
 Additionally, a student should minor in applied statistics. Math Analysis/Engineering: MATH 342/MATH 447, MATH 371, MATH 423
 Operations Research: MATH 371, MATH 421, MATH 445/MATH 446, MATH 447

(2) Three credits of internship will be applied to the major. Additional credits may count as free electives.

Cyber Security Track, Computer Science, BS

IUP's computer science programs share a curricular core covering fundamental concepts, programming, problem solving, data structures, algorithms, software engineering, database, and seminars on technical topics and the profession. The department focuses on providing a broad foundation to create agile graduates who can adapt to the rapidly changing trends in the computer science and cybersecurity fields. Every student in the B.S. in Cyber Security track also completes a minor in criminology. Based on this program, IUP was awarded

recognition as a National Center of Academic Excellence in Information Assurance Education by the National Security Agency and the Department of Homeland Security. Students get hands-on training and opportunities to delve into penetration testing and ethical hacking while completing theoretical and applied upper-level coursework in computer networking, cryptography, and information security. Courses from the Department of Criminology in loss prevention, cybersecurity, and legal aspects enable graduates to coordinate with law enforcement on cyber-crime investigations.

Cybersecurity graduates work in computing and information-related areas of law enforcement, business, industry, and government agencies. Recent graduates have found careers as cyber security analysts, information security analysts and forensic computer analysts, as well as being more traditional programmers for business applications and software developers.

Liberal Studies: 43-44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

- MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3 (1)**

Social Science:

- CRIM 101 - Crime and Justice Systems **Credits: 3 (2)**

Liberal Studies Elective: 3

- MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**
- No courses with COSC prefix

Major: 49

Core Courses:

- COSC 105 - Fundamentals of Computer Science **Credits: 3**
- COSC 110 - Problem Solving and Structured Programming **Credits: 3**
- COSC 210 - Object-Oriented and GUI Programming **Credits: 3**
- COSC 220 - Applied Computer Programming **Credits: 4**
- COSC 300 - Computer Organization and Assembly Language **Credits: 3**
- COSC 310 - Data Structures and Algorithms **Credits: 3**
- COSC 319 - Software Engineering Concepts **Credits: 3**
- COSC 341 - Introduction to Database Management Systems **Credits: 3**
- COSC 380 - Seminar on the Computer Profession and Ethics **Credits: 2**
- COSC 480 - Seminar on Technical Topics **Credits: 1**

Cyber Security Required Courses:

- COSC 216 - Introduction to Cyber Security **Credits: 3**
- COSC 345 - Computer Networks **Credits: 3**
- COSC 356 - Network Security **Credits: 3**
- COSC 473 - Software Engineering Practice **Credits: 3**
- or
- COSC 493 - Internship in Computer Science **Credits: 6-12 (3)**

Controlled Electives:

6cr from the following: (4, 5)

- COSC 362 - Unix Systems **Credits: 3**
- COSC 365 - Web Architecture and Application Development **Credits: 3**
- IFMG 468 - Information Technology (IT) Security **Credits: 3**

Upper-Level Electives:

3cr from the following: (5, 6)

- COSC 410 - Computer Architecture **Credits: 3**
- COSC 427 - Introduction to Cryptography **Credits: 3**
- COSC 429 - Digital Forensics **Credits: 3**
- COSC 430 - Introduction to Systems Programming **Credits: 3**
- COSC 432 - Introduction to Operating Systems **Credits: 3**
- COSC 454 - Information Assurance Administration **Credits: 3**
- COSC 465 - Distributed Processing and Web Services **Credits: 3**
- COSC 482 - Independent Study **Credits: 1-4**

Minor in Criminology: 15

(2)

Other Requirements: 3

Additional Mathematics:

- MATH 309 - Discrete Mathematics **Credits: 3**

Free Electives: 9-10

Total Degree Requirements: 120

(1) MATH 125 can be substituted by MATH 121.

(2) CRIM 101 (taken as part of the social science requirement) is counted as part of the 18cr Criminology minor. Fifteen additional credits of CRIM are required.

(3) COSC 493 may be selected after completion of sophomore year. Note: If a 6cr COSC 493 is taken, 3cr are applied toward COSC required courses and COSC 473 is required. If a 12 cr COSC 493 is taken, 3cr are applied toward COSC required course and 3cr toward COSC upper-level electives.

(4) Upper-level electives may be counted as controlled electives. 3cr of Intermediate Level foreign language may be applied toward controlled electives.

(5) Controlled and upper-level electives may not be applied toward more than one track in computer science.

(6) No more than 6 credits of overlap can be used for Computer Science majors and Cyber Security minors.

Languages and Systems Track, Computer Science, BS

IUP's computer science programs share a curricular core covering fundamental concepts, programming, problem solving, data structures, algorithms, software engineering, database, and seminars on technical topics and the profession. The department focuses on providing a broad foundation to create agile graduates who can adapt to the rapidly changing trends in the computer science field. Every student in the B.S. in Languages and Systems track also completes a minor in mathematics. This program is accredited by ABET, the nationwide board for accreditation of computing, engineering technology, and applied and natural science programs. Courses held in computer classrooms offer hands-on learning that blends theory with supervised practice to train work-force ready graduates. Selected theoretical and applied upper-level courses reflect the technical nature of this track and provide students with in-depth skills to analyze complex problems, to identify interdisciplinary solutions, and to manage software implementations.

Graduates leverage the widely recognized ABET credential when entering the workforce or applying to graduate programs. Many of the Languages and Systems track students continue with graduate school or work in analytical and computer-dependent areas of business, government, and industry. Recent graduates have started their careers with positions in systems analysis, programming or business applications, software development, scientific and applied mathematical programming, and other computer-related areas.

Liberal Studies: 43-44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

- MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits:** 3 (1)

Natural Science: Option I

- See requirements for **Natural Science: Option I** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Liberal Studies Elective: 3

- MATH 216 - Probability and Statistics for Natural Sciences **Credits:** 3 (6)
- no course with COSC prefix

Major: 48

Core Courses:

- COSC 105 - Fundamentals of Computer Science **Credits:** 3
- COSC 110 - Problem Solving and Structured Programming **Credits:** 3
- COSC 210 - Object-Oriented and GUI Programming **Credits:** 3
- COSC 300 - Computer Organization and Assembly Language **Credits:** 3
- COSC 310 - Data Structures and Algorithms **Credits:** 3
- COSC 319 - Software Engineering Concepts **Credits:** 3
- COSC 341 - Introduction to Database Management Systems **Credits:** 3
- COSC 380 - Seminar on the Computer Profession and Ethics **Credits:** 2
- COSC 480 - Seminar on Technical Topics **Credits:** 1

Languages and Systems Required Courses:

- COSC 460 - Theory of Computation **Credits:** 3

- COSC 420 - Modern Programming Languages **Credits:** 3
or
- COSC 424 - Compiler Construction **Credits:** 3
- COSC 473 - Software Engineering Practice **Credits:** 3
or
- COSC 493 - Internship in Computer Science **Credits:** 6-12 (2)

Controlled Electives:

(3, 4)

- COSC 220 - Applied Computer Programming **Credits:** 4
- COSC 343 - Introduction to Numerical Methods **Credits:** 3 (5)
or
- MATH 343 - Introduction to Numerical Methods **Credits:** 3 (5)
- COSC 345 - Computer Networks **Credits:** 3
- COSC 355 - Computer Graphics **Credits:** 3
- COSC 362 - Unix Systems **Credits:** 3
- COSC 365 - Web Architecture and Application Development **Credits:** 3

Upper-Level Electives:

6cr from the following: (4)

- COSC 405 - Artificial Intelligence **Credits:** 3
- COSC 410 - Computer Architecture **Credits:** 3
- COSC 430 - Introduction to Systems Programming **Credits:** 3
- COSC 432 - Introduction to Operating Systems **Credits:** 3
- COSC 465 - Distributed Processing and Web Services **Credits:** 3
- COSC 493 - Internship in Computer Science **Credits:** 6-12
(2)

Other Requirements: 12

Mathematics:

A minor in mathematics which must include: (6)

- MATH 171 - Introduction to Linear Algebra **Credits:** 3
- MATH 309 - Discrete Mathematics **Credits:** 3

Free Electives: 15-16

Total Degree Requirements: 120

(1) MATH 125 can be substituted by MATH 121.

(2) COSC 493 may be selected after completion of sophomore year. Note: If a 6cr COSC 493 is taken, 3cr are applied toward COSC required courses. If a 12cr COSC 493 is taken, 3cr are applied toward required courses and 3cr toward COSC upper-level electives.

(3) Upper-level electives may be counted as controlled electives. 3cr of Intermediate Level foreign language may be applied toward controlled electives.

(4) Controlled and upper level electives may not be applied toward more than one track in computer science.

(5) COSC 343 or MATH 343 may be counted as a computer science elective or as a part of the mathematics minor, but not both.

(6) MATH 125 and MATH 216 (taken as liberal studies requirements) are also counted towards the minor. Mathematics minor requires at least 6cr of 300-level or higher MATH courses.

Mathematics, BS

The program for a mathematics major in the Kopchick College of Natural Sciences and Mathematics has three options. A student may pursue a degree with a major in mathematics or a degree with a major in mathematics with a concentration in either applied mathematics or actuarial science. Those completing a degree with a major in mathematics will be prepared to continue their studies in mathematics in graduate school, though some may enter business, industry, or government service. Students receiving a mathematics degree with a concentration in applied mathematics will be primarily prepared to enter business, industry, or government service in an area where mathematics or computer science is used, or to continue their studies in applied mathematics or computer science in graduate school. Students in the actuarial science concentration take additional course work in finance and economics, preparing them to complete the first two professional actuarial exams and to pursue employment in the areas of insurance and investment.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

- MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3**

Liberal Studies Electives: 6

- No courses with MATH prefix, includes intermediate-level foreign language

Major: 40-41

Required Courses:

- MATH 111 - First-year Seminar **Credits: 1**
- MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3**
- MATH 171 - Introduction to Linear Algebra **Credits: 3**
- MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**
- MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits: 3**
- MATH 271 - Introduction to Mathematical Proofs I **Credits: 3**
- MATH 272 - Introduction to Mathematical Proofs II **Credits: 3**
- MATH 341 - Differential Equations **Credits: 3**
- MATH 480 - Senior Seminar **Credits: 3**

Controlled Electives:

Four Courses from the Following: 12

- MATH 371 - Linear Algebra **Credits: 3**
- MATH 421 - Advanced Calculus I **Credits: 3**
- MATH 422 - Advanced Calculus II **Credits: 3**
- MATH 423 - Complex Variables **Credits: 3**
- MATH 427 - Introduction to Topology **Credits: 3**
- MATH 476 - Abstract Algebra I **Credits: 3**
- MATH 477 - Abstract Algebra II **Credits: 3**

A Minimum of 3 Additional cr From the List Above or the Following: 3-4

- MATH 342 - Advanced Mathematics for Applications **Credits: 4**
- MATH 350 - History of Mathematics **Credits: 3**
- MATH 353 - Theory of Numbers **Credits: 3**
- MATH 355 - Foundations of Geometry I **Credits: 3**
- MATH 363 - Mathematical Statistics I **Credits: 3**
- MATH 364 - Mathematical Statistics II **Credits: 3**
- MATH 445 - Deterministic Models in Operations Research **Credits: 3**
- MATH 446 - Probabilistic Models in Operations Research **Credits: 3**
- MATH 447 - Modeling and Simulation **Credits: 3**

Other Requirements: 3

Computer Science:

- COSC 110 - Problem Solving and Structured Programming **Credits: 3**

Free Electives: 29-31

Total Degree Requirements: 120

Software Engineering Track, Computer Science, BS

IUP's computer science programs share a curricular core covering fundamental concepts, programming, problem solving, data structures, algorithms, software engineering, database, and seminars on technical topics and the profession. The department focuses on providing a broad foundation to create agile graduates who can adapt to the rapidly changing trends in the computer science field. Upper-level courses are designed to provide depth of theory and build career skills. Every student in the B.S. in Software Engineering track also completes a minor (or double major) in a complementary field. The program trains students to analyze complex computing problems and to identify solutions by applying software engineering principles and by leveraging their skills from other disciplines. The curriculum includes courses held in computer classrooms and offers hands-on learning that blends theory with supervised practice. The track prepares work-force ready graduates who function effectively as a team members or leaders while engaged in software engineering activities.

Students completing the program are prepared to work in computer-dependent areas of business, government, and industry. Recent graduates have started their careers with positions in programming and systems analysis, business applications, computer software development, scientific and applied mathematical programming, and other computer-related areas or have continued with graduate school.

Liberal Studies: 43-44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

- MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3 (1)**

Liberal Studies Elective: 3

- MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**
- No courses with COSC prefix

Major: 46

Required Courses:

- COSC 105 - Fundamentals of Computer Science **Credits: 3**
- COSC 110 - Problem Solving and Structured Programming **Credits: 3**
- COSC 210 - Object-Oriented and GUI Programming **Credits: 3**
- COSC 220 - Applied Computer Programming **Credits: 4**
- COSC 300 - Computer Organization and Assembly Language **Credits: 3**
- COSC 310 - Data Structures and Algorithms **Credits: 3**
- COSC 319 - Software Engineering Concepts **Credits: 3**
- COSC 341 - Introduction to Database Management Systems **Credits: 3**
- COSC 365 - Web Architecture and Application Development **Credits: 3**
- COSC 380 - Seminar on the Computer Profession and Ethics **Credits: 2**
- COSC 480 - Seminar on Technical Topics **Credits: 1**

- COSC 473 - Software Engineering Practice **Credits: 3**
or
- COSC 493 - Internship in Computer Science **Credits: 6-12**

Controlled Electives:

9cr from the following: (3, 4, 5)

- COSC 343 - Introduction to Numerical Methods **Credits: 3**
or
- MATH 343 - Introduction to Numerical Methods **Credits: 3**

- COSC 216 - Introduction to Cyber Security **Credits: 3**
or
- COSC 356 - Network Security **Credits: 3**

- COSC 345 - Computer Networks **Credits: 3**
- COSC 355 - Computer Graphics **Credits: 3**
- COSC 362 - Unix Systems **Credits: 3**
- IFMG 455 - Business Data Mining **Credits: 3**

Upper-Level Electives:

3cr from the following: (5)

- COSC 405 - Artificial Intelligence **Credits: 3**
- COSC 410 - Computer Architecture **Credits: 3**
- COSC 420 - Modern Programming Languages **Credits: 3**
- COSC 424 - Compiler Construction **Credits: 3**
- COSC 430 - Introduction to Systems Programming **Credits: 3**

- COSC 406
- COSC 465 - Distributed Processing and Web Services **Credits:** 3

Other Requirements: 3

Additional Mathematics:

- MATH 309 - Discrete Mathematics **Credits:** 3

Minor: 9-20

Complete a minor from one of the following areas:

- Cyber Security **Credits:** 12-18
- Any department in the Kopchick College of Natural Sciences and Mathematics (6) **Credits:** 9-20
- Business **Credits:** 18
- Economics **Credits:** 12-15
- Communications Media **Credits:** 18
- Geography or Regional Planning **Credits:** 18
- Other minors or concentrations approved by the department chair

Free Electives: 7-19

Total Degree Requirements: 120

(1) MATH 125 can be substituted by MATH 121.

(2) COSC 493 may be selected after completion of sophomore year. **Note:** If a 6cr COSC 493 is taken, 3cr are applied toward COSC upper-level electives and COSC 473 is required. If a 12cr COSC 493 is taken, 3cr are applied toward COSC required courses and 3cr toward COSC upper-level electives.

(3) Upper-level electives may be counted as controlled electives. 3cr of Intermediate Level foreign language may be applied toward controlled electives.

(4) COSC 216 cannot be counted for major credit if a student does a Cyber Security minor.

(5) Controlled and upper level electives may not be applied toward more than one track in computer science.

(6) No more than six credits of overlap can be used for computer science majors and cyber security minor

Bachelor of Science in Education

Mathematics Education, BSED

The program leading to the BSEd degree with a major in mathematics education prepares the student for teaching mathematics at one of two different concentrations. The secondary mathematics concentration prepares the student for teaching mathematics in grades 7-12. The middle level education concentration prepares the student for teaching grades 4-8 with a specialization in mathematics. Graduates from the program also have the option to continue their formal education at the graduate level or work in government or industry.

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 43-45

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities:

- HIST 196 - Explorations in US History **Credits: 3**

Mathematics:

- MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3**
or
- MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4 (1)**

Social Science: (2)

Natural Science: (3)

Liberal Studies Elective: 3

- No courses with MATH prefix

College: 29-31

Preprofessional Education Sequence:

- ACE 103 - Digital Instructional Technology **Credits: 3**
- EDSP 102 - Educational Psychology **Credits: 3**

Professional Education Sequence:

- EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits: 2**
- EDEX 323 - Instruction of English Language Learners with Special Needs **Credits: 2**
(4)
- EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**
- EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**
- EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**
- EDUC 441 - Student Teaching **Credits: 5-12 (12 credits required)**
- EDUC 442 - School Law **Credits: 1**
- MATH 413 - Methods for Teaching Mathematics **Credits: 3**

Major: 19

Required Courses:

- MATH 111 - First-year Seminar **Credits: 1**
- MATH 317 - Probability and Statistics for Mathematics Instruction **Credits: 3**
- MATH 456 - Geometry for Mathematics Instruction **Credits: 3**
- MATH 457 - Number Theory for Mathematics Instruction **Credits: 3**

- MATH 460 - Technology in Mathematics Instruction **Credits:** 3
- MATH 461 - Discrete Mathematics for Mathematics Instruction **Credits:** 3
- MATH 471 - Algebra for Mathematics Instruction **Credits:** 3

Concentration Area:

Select one concentration

Secondary Mathematics Concentration: 24

- COSC 110 - Problem Solving and Structured Programming **Credits:** 3
- MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits:** 3
- MATH 171 - Introduction to Linear Algebra **Credits:** 3
- MATH 216 - Probability and Statistics for Natural Sciences **Credits:** 3
- MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits:** 3
- MATH 271 - Introduction to Mathematical Proofs I **Credits:** 3
- MATH 272 - Introduction to Mathematical Proofs II **Credits:** 3
- MATH 350 - History of Mathematics **Credits:** 3

Free Electives Secondary Mathematics: 2-3

Total Degree Requirements Secondary Mathematics: 120

Middle Level Mathematics Concentration: 28

- One additional math course **Credits:** 3 (5)
- GEOS 101 - The Dynamic Earth **Credits:** 3 (6)
- GEOS 102 - The Dynamic Earth Lab **Credits:** 1
- MIDL 221 - Literature for Middle Level **Credits:** 3
- MIDL 222 - Reading Instruction and Assessment in Grades 4-8 **Credits:** 3
- MIDL 310 - Instructional Theory and Planning for the Middle Level **Credits:** 3
- MIDL 311 - Social Studies Instruction and Assessment in Grades 4-8 **Credits:** 3
- MIDL 312 - Science Instruction and Assessment in Grades 4-8 **Credits:** 3
- MIDL 315 - Classroom Management and Adolescent Development **Credits:** 3
- MIDL 425 - Methods of Teaching Language Arts in Grades 4-8 **Credits:** 3

Total Degree Requirement Middle Level Mathematics: 121

(*) See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

(1) Students in the secondary mathematics concentration take MATH 125 and students in the middle level concentration take MATH 121.

(2) Students in the secondary mathematics concentration take PSYC 101 and students in the middle level concentration take ECON 101 or ECON 121; GEOG 101, GEOG 102, GEOG 104; and PLSC 101 or PLSC 111.

(3) Students in the middle level concentration take BIOL 103 or BIOL 104 or BIOL 106 /BIOL 116; SCI 105.

(4) Students in the secondary education concentration only.

(5) The following courses are excluded MATH 100, MATH 101, and MATH 150. This course can be used as part of the 6crs of math needed to apply for Step I of Teacher Education.

(6) The course meets the PDE requirement of 4cr in geoscience for Middle- Level Education Grades 4-8 certification

Minor

Applied Statistics Minor

The Applied Statistics minor consists of 18 credits in mathematics and statistics. It is designed for students who want to apply statistical methodology to investigate real-world problems. The use of statistical software and interpretation of results is heavily emphasized. The minor is created for students from a variety of majors, including those in the natural sciences, social sciences, and business.

Required Courses: 9

- MATH 214 - Probability and Statistics for Business Majors **Credits: 3**
or
- MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**
or
- MATH 217 - Probability and Statistics **Credits: 3**
- MATH 411 - Univariate Data Analysis **Credits: 3**
- MATH 412 - Multivariate Statistics **Credits: 3**

Controlled Electives: 9

Select at least 9cr from the following:

- MATH 115 - Applied Mathematics for Business **Credits: 3**
or
- MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**
or
- MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3**

- MATH 363 - Mathematical Statistics I **Credits: 3**
- MATH 364 - Mathematical Statistics II **Credits: 3**
- CRIM 306 - Criminological Research Methods **Credits: 3**
- QBUS 215 - Business Statistics **Credits: 3**
- ECON 356 - Introduction to Econometrics **Credits: 3**
- PSYC 290 - Research Design and Analysis I **Credits: 4**
- PSYC 291 - Research Design and Analysis II **Credits: 4**
or
- Any statistics or quantitative methods course approved by the Applied Statistics advisor. Students majoring in mathematics cannot select MATH 115, MATH 121, or MATH 125 as a controlled elective

Total Minor Requirements: 18

Computer Science Minor

Required Courses:

- COSC 110 - Problem Solving and Structured Programming **Credits: 3**
- COSC 210 - Object-Oriented and GUI Programming **Credits: 3**

Controlled Electives: 12

(1, 2, 3)

Select additional 12 credits in computer science including at least six credits from 300-level or higher courses. COSC 143 cannot be counted as part of a computer science minor.

Total Minor Requirements: 18

- (1) COSC 101 is an appropriate entry course for this minor. However, COSC 101 cannot be counted as part of a Computer Science minor by management information systems majors.
- (2) No more than six credits of overlap can be used for computer science and cyber security minors.
- (3) See Computer Science minor advisor for suggestions.

Elementary and Middle-Level Mathematics Minor

The minor consists of 18 credits in Elementary and Middle-Level Mathematics Education. The minor may offer additional preparation for the teaching of elementary and middle mathematics. This minor does not lead to certification and is not open to students majoring in middle-level education 4-8/mathematics.

Required Courses: 12

- MATH 151 - Elements of Mathematics I **Credits: 3**
- MATH 152 - Elements of Mathematics II **Credits: 3**
- MATH 456 - Geometry for Mathematics Instruction **Credits: 3**
- MATH 471 - Algebra for Mathematics Instruction **Credits: 3**

Controlled Electives: 6

(1)

Select 6cr from the following:

- MATH 153 - Elements of Algebra **Credits: 3**
- MATH 317 - Probability and Statistics for Mathematics Instruction **Credits: 3**
- MATH 420 - Patterns and Functions for Elementary/Middle-Level Teachers **Credits: 3**
- MATH 457 - Number Theory for Mathematics Instruction **Credits: 3**
- MATH 458 - Logic and Logical Games for Elementary/Middle-Level Teachers **Credits: 3**
- MATH 459 - Technology in Elementary/Middle-Level Mathematics Instruction **Credits: 3**
- MATH 461 - Discrete Mathematics for Mathematics Instruction **Credits: 3**

Total Minor Requirements: 18

- (1) Other MATH content courses with the approval of the minor advisor.

Mathematics Minor

The minor consists of a minimum of 18 credits in mathematics including at least 6 credits from 300-level or higher courses. The minor prepares students for advanced study in areas such as economics, computer science, physics, and other natural sciences. Anyone required to take a year of calculus should consider the Mathematics minor.

A cumulative GPA of at least 2.0 in MATH courses is required for the Mathematics or Applied Statistics minor. No more than 6 credits of overlap can be used for the Mathematics and Applied Statistics minors. Transfer students must take at least three courses from IUP with at least two courses from the IUP Mathematics Department in order to complete a minor.

Required Courses: 6-8

- MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**
or
- MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3**
- MATH 122 - Calculus II for Natural and Social Sciences **Credits: 4**
or
- MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3**

Controlled Electives: 10-12

(1, 2)

Select the additional 10-12 credits from MATH 343, MATH 309, or any required courses for mathematics majors. One of MATH 411 or MATH 412 is permitted but not both. Must include 6 credits from courses at the 300 level or higher

Total Minor Requirements: 18

(1) The following courses are excluded: MATH 100, MATH 101, MATH 105, MATH 110, MATH 115, MATH 214, MATH 217, MATH 417, MATH 418, MATH 480 and courses for the Middle-Level Education 4-8/Mathematics specialization.

(2) No more than 6cr of overlap with the minor in Applied Statistics is permitted.

Natural Science

Website: www.iup.edu/preprofessional

Robert Hinrichsen, Coordinator

The program leading to the BS degree with a major in natural science is designed to prepare students for admission to professional schools—chiropractic, dentistry, optometry, pharmacy, podiatry, physical therapy, physician assistant, and audiology. If they qualify, the BS degree with a major in natural science can be earned by students who are accepted for early admission to professional schools that have an articulation agreement with IUP. In some cases, students interested in obtaining a four-year degree before entering a medical or professional school should enroll in a program leading to a BA or BS degree in the departments of Biology or Chemistry. Students considering a professional career in a high-technology business or health oriented businesses or industries may wish to obtain a foundation in the natural sciences while using their free electives to pursue additional work in areas such as molecular biology, biochemistry, psychology, economics, pre-law, or athletic training. The BS program with a major in natural science may not be used for a second major or a second degree by majors in the Kopchick College of Natural Sciences and Mathematics. For further information, contact the Natural Science program coordinator.

Bachelor of Science

Natural Science, BS

Liberal Studies: 48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

- MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**

Natural Science:

- CHEM 111 - General Chemistry I **Credits: 4**
- CHEM 112 - General Chemistry II **Credits: 4**

Social Science:

- PSYC 101 - General Psychology **Credits: 3**

Writing Intensive:

A second writing-intensive course is not required for three-year students who transfer to a professional school with an articulation agreement.

Liberal Studies Elective: 3

- COSC 101 - Computer Literacy **Credits: 3**
or
- IFMG 101 - Computer Literacy **Credits: 3**
- No courses with SCI prefix

Major: 43

Required Courses:

Biology:

- BIOL 150 - Human Anatomy **Credits: 4**
- BIOL 201 - Principles of Ecology and Evolution **Credits: 4**
- BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**
- BIOL 203 - Principles of Genetics and Development **Credits: 4**
- BIOL 240 - Human Physiology **Credits: 4**
- BIOL 241 - Introductory Medical Microbiology **Credits: 4**

Chemistry:

- CHEM 231 - Organic Chemistry I **Credits: 4**
- CHEM 332 - Organic Chemistry II **Credits: 4**
or
- CHEM 351 - Biochemistry **Credits: 4**

Physics:

- PHYS 111 - Physics I Lecture **Credits: 3**
- PHYS 121 - Physics I Lab **Credits: 1**
- PHYS 112 - Physics II Lecture **Credits: 3**

- PHYS 122 - Physics II Lab **Credits: 1**

Mathematics:

- MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**

Other Requirements: 0-6

- Foreign Language Intermediate Level 0-6 cr

Free Electives: 23-29

Total Degree Requirements: 120

Pre-chiropractic Track, Natural Science, BS

Accelerated three-year New York Chiropractic College, Logan Chiropractic College, Sherman Chiropractic College, and Parker Chiropractic programs. A maximum of 30cr of work may be transferred after the first year at one of the chiropractic school programs. Upon completion of the first year of studies at one of the chiropractic school programs, a transcript from that school is to be sent by the student to the dean of the College of Natural Sciences and Mathematics with a note requesting application materials for graduation.

Liberal Studies: 48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

- MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**

Natural Science:

- CHEM 111 - General Chemistry I **Credits: 4**
- CHEM 112 - General Chemistry II **Credits: 4**

Social Science:

- PSYC 101 - General Psychology **Credits: 3**

Writing Intensive:

A second writing-intensive course is not required for three-year students who transfer to a professional school with an articulation agreement.

Liberal Studies Elective: 3

- COSC 101 - Computer Literacy **Credits: 3**
- No courses with SCI prefix

Major: 43

Required Courses:

- BIOL 150 - Human Anatomy **Credits: 4**
- BIOL 201 - Principles of Ecology and Evolution **Credits: 4**
- BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**
- BIOL 203 - Principles of Genetics and Development **Credits: 4**
- BIOL 240 - Human Physiology **Credits: 4**
- BIOL 241 - Introductory Medical Microbiology **Credits: 4**
- CHEM 231 - Organic Chemistry I **Credits: 4**

- CHEM 332 - Organic Chemistry II **Credits: 4**
or
- CHEM 351 - Biochemistry **Credits: 4**

- PHYS 111 - Physics I Lecture **Credits: 3**
- PHYS 121 - Physics I Lab **Credits: 1**
- PHYS 112 - Physics II Lecture **Credits: 3**
- PHYS 122 - Physics II Lab **Credits: 1**
- MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**

Other Requirements: 0-6

Foreign Language Intermediate Level

Free Electives: 23-29

(1)

- Electives to meet minimum of 90 IUP cr and minimum of 24cr in Humanities and Social Sciences for admission to affiliated chiropractic colleges after three years at IUP
- Maximum cr for work at affiliated chiropractic school **Credits: 30**

Total Degree Requirements: 120

(1) Student is to work with his/her advisor to select appropriate free electives for professional school. Additional courses in biology and KHSS 315 or KHSS 345 are recommended.

Pre-dentistry Track, Natural Science, BS

Accelerated three-year Temple University School of Dentistry program. A maximum of 30cr of work may be transferred after the first year at Temple University School of Dentistry. Upon completion of the first year of studies at Temple University School of Dentistry, a transcript from Temple University is to be sent by the student to the dean of the College of Natural Sciences and Mathematics with a note requesting application materials for graduation.

Liberal Studies: 48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

- MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**

Natural Science:

- CHEM 111 - General Chemistry I **Credits: 4**
- CHEM 112 - General Chemistry II **Credits: 4**

Social Science:

- PSYC 101 - General Psychology **Credits: 3**

Writing Intensive:

A second writing-intensive course is not required for three-year students who transfer to a professional school with an articulation agreement.

Liberal Studies Elective: 3

- COSC 101 - Computer Literacy **Credits: 3**
- No courses with SCI prefix

Major: 43

Required Courses:

- BIOL 150 - Human Anatomy **Credits: 4**
- BIOL 201 - Principles of Ecology and Evolution **Credits: 4**
- BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**
- BIOL 203 - Principles of Genetics and Development **Credits: 4**
- BIOL 240 - Human Physiology **Credits: 4**
- BIOL 241 - Introductory Medical Microbiology **Credits: 4**
- CHEM 231 - Organic Chemistry I **Credits: 4**
- CHEM 332 - Organic Chemistry II **Credits: 4**
- or
- CHEM 351 - Biochemistry **Credits: 4**
- PHYS 111 - Physics I Lecture **Credits: 3**
- PHYS 121 - Physics I Lab **Credits: 1**
- PHYS 112 - Physics II Lecture **Credits: 3**
- PHYS 122 - Physics II Lab **Credits: 1**
- MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**

Other Requirements: 0-6

- Foreign Language Intermediate Level

Free Electives: 23-29

(1)

- Electives to meet minimum of 90 IUP cr and minimum of 24cr in Humanities and Social Sciences for admission to affiliated dental school after three years at IUP
- Maximum cr for work at affiliated dental school **Credits:** 30

Total Degree Requirements: 120

(1) Student is to work with his/her advisor to select appropriate free electives for professional school. Ceramics and additional courses in biology are highly recommended.

Pre-optometry Track, Natural Science, BS

Accelerated three-year Salus University program. A maximum of 30cr of work may be transferred after the first year at Salus. Upon completion of the first year of studies at Salus, a transcript from Salus is to be sent by the student to the dean of the College of Natural Sciences and Mathematics with a note requesting application materials for graduation.

Liberal Studies: 48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

- MATH 121 - Calculus I for Natural and Social Sciences **Credits:** 4

Natural Science:

- CHEM 111 - General Chemistry I **Credits:** 4
- CHEM 112 - General Chemistry II **Credits:** 4

Social Science:

- ECON 101 - Basic Economics **Credits:** 3
- PSYC 101 - General Psychology **Credits:** 3

Writing Intensive:

A second writing-intensive course is not required for three-year students who transfer to a professional school with an articulation agreement.

Liberal Studies Elective: 3

- COSC 101 - Computer Literacy **Credits:** 3
- No courses with SCI prefix

Major: 43

Required Courses:

- BIOL 150 - Human Anatomy **Credits:** 4
- BIOL 201 - Principles of Ecology and Evolution **Credits:** 4

- BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**
 - BIOL 203 - Principles of Genetics and Development **Credits: 4**
 - BIOL 240 - Human Physiology **Credits: 4**
 - BIOL 241 - Introductory Medical Microbiology **Credits: 4**
 - CHEM 231 - Organic Chemistry I **Credits: 4**
 - CHEM 332 - Organic Chemistry II **Credits: 4**
- or
- CHEM 351 - Biochemistry **Credits: 4**
 - PHYS 111 - Physics I Lecture **Credits: 3**
 - PHYS 121 - Physics I Lab **Credits: 1**
 - PHYS 112 - Physics II Lecture **Credits: 3**
 - PHYS 122 - Physics II Lab **Credits: 1**
 - MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**

Other Requirements: 0-6

Foreign Language Intermediate Level

Free Electives: 23-29

(1)

- Electives to meet minimum of 90 IUP cr and minimum of 24cr in Humanities and Social Sciences for admission to affiliated optometry school after three years at IUP
- Maximum cr for work at affiliated optometry school **Credits: 30**

Total Degree Requirements: 120

(1) Student is to work with his/her advisor to select appropriate free electives for professional school. Neurobiology and optics are highly recommended courses.

Pre-pharmacy Track, Natural Science, BS

Accelerated three-year Shenandoah University School of Pharmacy (SUSP) or Lake Erie College of Osteopathic Medicine School of Pharmacy (LECOMP) program. A maximum of 30cr may be transferred after first year at SUSP or LECOMP. Upon completion of the first year of studies at either SUSP or LECOMP, a transcript from SUSP or LECOMP is to be sent by the student to the dean of the College of Natural Sciences and Mathematics at IUP with a note requesting application materials for graduation.

Liberal Studies: 48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

- MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**

Natural Science:

- CHEM 111 - General Chemistry I **Credits: 4**
- CHEM 112 - General Chemistry II **Credits: 4**

Social Science:

- ECON 101 - Basic Economics **Credits: 3**
- PSYC 101 - General Psychology **Credits: 3**

Writing Intensive:

- A second writing-intensive course is not required for three-year students who transfer to a professional school with an articulation agreement.

Liberal Studies Elective: 3

- COSC 101 - Computer Literacy **Credits: 3**
- No courses with SCI prefix

Major: 43

Required Courses:

- BIOL 150 - Human Anatomy **Credits: 4**
- BIOL 201 - Principles of Ecology and Evolution **Credits: 4**
- BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**
- BIOL 203 - Principles of Genetics and Development **Credits: 4**
- BIOL 240 - Human Physiology **Credits: 4**
- BIOL 241 - Introductory Medical Microbiology **Credits: 4**
- CHEM 231 - Organic Chemistry I **Credits: 4**
- CHEM 332 - Organic Chemistry II **Credits: 4**
- or
- CHEM 351 - Biochemistry **Credits: 4**
- PHYS 111 - Physics I Lecture **Credits: 3**
- PHYS 121 - Physics I Lab **Credits: 1**
- PHYS 112 - Physics II Lecture **Credits: 3**
- PHYS 122 - Physics II Lab **Credits: 1**
- MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**

Other Requirements: 0-6

Foreign Language Intermediate Level

Free Electives: 23-29

(1)

- Electives to meet minimum of 90 IUP cr and minimum of 24cr in Humanities and Social Sciences for admission to affiliated pharmacy school after three years at IUP
- Maximum cr for work at affiliated pharmacy school **Credits: 30**

Total Degree Requirements: 120

(1) Student is to work with his/her advisor to select appropriate free electives for professional school. Additional courses in chemistry and COMM 101 are recommended.

Pre-physical Therapy, Natural Science, BS Track

Accelerated three-year Gannon University School of Physical Therapy program. A maximum of 30cr of work may be transferred after the first year at Gannon University School of Physical Therapy. Upon completion of the first year of studies at one of the physical therapy schools, a transcript from that school is to be sent by the student to the dean of the College of Natural Sciences and Mathematics with a note requesting application materials for graduation. Articulation agreement with Chatham University School of Physical Therapy requires a BS from IUP.

Liberal Studies: 48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

- MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**

Natural Science:

- CHEM 111 - General Chemistry I **Credits: 4**
- CHEM 112 - General Chemistry II **Credits: 4**

Social Science:

- ECON 101 - Basic Economics **Credits: 3**
- PSYC 101 - General Psychology **Credits: 3**

Writing Intensive:

A second writing-intensive course is not required for three-year students who transfer to a professional school with an articulation agreement.

Liberal Studies Elective: 3

- COSC 101 - Computer Literacy **Credits: 3**
- No courses with SCI prefix

Major: 43

Required Courses:

- BIOL 150 - Human Anatomy **Credits: 4**
- BIOL 201 - Principles of Ecology and Evolution **Credits: 4**
- BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**
- BIOL 203 - Principles of Genetics and Development **Credits: 4**
- BIOL 240 - Human Physiology **Credits: 4**
- BIOL 241 - Introductory Medical Microbiology **Credits: 4**
- CHEM 231 - Organic Chemistry I **Credits: 4**

- CHEM 332 - Organic Chemistry II **Credits: 4**

or

- CHEM 351 - Biochemistry **Credits: 4**
- PHYS 111 - Physics I Lecture **Credits: 3**
- PHYS 112 - Physics II Lecture **Credits: 3**
- PHYS 121 - Physics I Lab **Credits: 1**
- PHYS 122 - Physics II Lab **Credits: 1**
- MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**

Other Requirements: 0-6

- Foreign Language Intermediate Level

Free Electives: 23-29

(1)

- Electives to meet minimum of 90 IUP cr and minimum of 24cr in Humanities and Social Sciences for admission to affiliated physical therapy school after three years at IUP
- Maximum cr for work at affiliated physical therapy school **Credits: 30**

Total Degree Requirements: 120

(1) Student is to work with his/her advisor to select appropriate free electives for professional school. Neurobiology, biomechanics, and athletic training are highly recommended.

Pre-physician Assistant Track, Natural Science, BS

Accelerated three-year Salus University program

Liberal Studies: 45

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

- MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**

Natural Science:

- CHEM 111 - General Chemistry I **Credits: 4**
- CHEM 112 - General Chemistry II **Credits: 4**

Social Science:

- PSYC 101 - General Psychology **Credits: 3**

Writing Intensive:

A second writing-intensive course is not required for three-year students who transfer to a professional school with an articulation agreement.

Liberal Studies Elective: 3

- COSC 101 - Computer Literacy **Credits: 3**
or
- IFMG 101 - Computer Literacy **Credits: 3**
- No courses with SCI prefix

Major: 49

Required Courses:

- BIOL 200 - Medical Terminology **Credits: 2**
- BIOL 201 - Principles of Ecology and Evolution **Credits: 4**
- BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**
- BIOL 203 - Principles of Genetics and Development **Credits: 4**
- BIOL 240 - Human Physiology **Credits: 4**
- BIOL 241 - Introductory Medical Microbiology **Credits: 4**
- BIOL 402 - Advanced Human Anatomy **Credits: 4**
- CHEM 231 - Organic Chemistry I **Credits: 4**
- CHEM 332 - Organic Chemistry II **Credits: 4**
- CHEM 351 - Biochemistry **Credits: 4**
- MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**
or
- MATH 217 - Probability and Statistics **Credits: 3**
- PHYS 111 - Physics I Lecture **Credits: 3**
- PHYS 121 - Physics I Lab **Credits: 1**
- PHYS 112 - Physics II Lecture **Credits: 3**
- PHYS 122 - Physics II Lab **Credits: 1**

Other Requirements: 0-4

- Foreign Language through Intermediate Level

Free Electives: 22-26

(1)

Total Degree Requirements: 120

(1) The student, under consultation with her/his advisor, should select free electives courses that are appropriate for the student's targeted post-graduate PA programs.

Pre-podiatry Track, Natural Science, BS

Accelerated three-year Temple University School of Podiatry program. A maximum of 30cr may be transferred after the first year at Temple University School of Podiatry. Upon completion of the first year of studies at Temple University School of Podiatry, a transcript from Temple University is to be sent by the student to the dean of the College of Natural Sciences and Mathematics at IUP with a note requesting application materials for graduation.

Liberal Studies: 48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

- MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**

Natural Science:

- CHEM 111 - General Chemistry I **Credits: 4**
- CHEM 112 - General Chemistry II **Credits: 4**

Social Science:

- ECON 101 - Basic Economics **Credits: 3**
- PSYC 101 - General Psychology **Credits: 3**

Writing Intensive:

A second writing-intensive course is not required for three-year students who transfer to a professional school with an articulation agreement.

Liberal Studies Elective: 3

- COSC 101 - Computer Literacy **Credits: 3**
- No courses with SCI prefix

Major: 43

Required Courses:

- BIOL 150 - Human Anatomy **Credits: 4**
- BIOL 201 - Principles of Ecology and Evolution **Credits: 4**
- BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**
- BIOL 203 - Principles of Genetics and Development **Credits: 4**
- BIOL 240 - Human Physiology **Credits: 4**
- BIOL 241 - Introductory Medical Microbiology **Credits: 4**
- CHEM 231 - Organic Chemistry I **Credits: 4**
- CHEM 332 - Organic Chemistry II **Credits: 4**
- or
- CHEM 351 - Biochemistry **Credits: 4**
- PHYS 111 - Physics I Lecture **Credits: 3**
- PHYS 121 - Physics I Lab **Credits: 1**
- PHYS 112 - Physics II Lecture **Credits: 3**
- PHYS 122 - Physics II Lab **Credits: 1**
- MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**

Other Requirements: 0-6

- Foreign Language Intermediate Level

Free Electives: 23-29

(1)

- Electives to meet minimum of 90 IUP cr and minimum of 24cr in Humanities and Social Sciences for admission to affiliated podiatry school after three years at IUP
- Maximum cr for work at affiliated podiatry school **Credits:** 30

Total Degree Requirements: 120

(1) Student is to work with his/her advisor to select appropriate free electives for professional school. Additional courses in biology are recommended.

Physics

Website: www.iup.edu/physics

Muhammad Z. Numan, Chair

The goal of the Department of Physics is to prepare students for productive careers in physics. Two-degree programs are offered: bachelor of science degree program in physics and bachelor of science in education degree program in physics education. The BS—Physics offers preparation for graduate study in physics or for research in industrial technology. There are three tracks in the BS—Physics program: Nanomanufacturing Technology, Pre-engineering, and Applied Physics.

Nanofabrication Cooperative Experience

The IUP physics department participates in a cooperative agreement with Penn State University (PSU) to help address the need of Pennsylvania industry for skilled nanofabrication workers. anyone who meets the prerequisite requirements may enroll through IUP in a one-semester experience at the PSU Center for Nanotechnology Education and Utilization (CNEU). These courses are offered in two modes: (1) as a capstone semester experience at the Penn State CNEU or (2) as a hybrid capstone semester consisting of distance learning followed by a two-week hands-on lab experience at CNEU. For more information, contact the physics department.

Bachelor of Science

Applied Physics, Physics, BS

The **BS—Physics/Applied Physics Track** is a practical degree in which the graduates will be trained to work in the semiconductor or electronics industry.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

- MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits:** 3

Natural Science:

- PHYS 131 - Physics I-C Lecture **Credits:** 3
- PHYS 141 - Physics I-C Lab **Credits:** 1

- PHYS 132 - Physics II-C Lecture **Credits: 3**
- PHYS 142 - Physics II-C Lab **Credits: 1**

Liberal Studies Elective: 3

- MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3**
- No courses with PHYS prefix

Major: 28

Required Courses:

- PHYS 131 - Physics I-C Lecture **Credits: 3 (1)**
- PHYS 132 - Physics II-C Lecture **Credits: 3 (1)**
- PHYS 141 - Physics I-C Lab **Credits: 1 (1)**
- PHYS 142 - Physics II-C Lab **Credits: 1 (1)**
- PHYS 331 - Modern Physics **Credits: 3**
- PHYS 345 - Optics **Credits: 3**
- PHYS 441 - Classical Mechanics **Credits: 3**
- PHYS 451 - Electricity and Magnetism **Credits: 3**

Additional Required Courses:

- PHYS 231 - Electronics **Credits: 4**
- PHYS 342 - Thermal and Statistical Physics **Credits: 3**
- PHYS 350 - Intermediate Experimental Physics I **Credits: 3**
- PHYS 475 - Physics of Semiconductor Devices I **Credits: 3**

Controlled Electives: 19-21

Select one of the following subfields:

Solid State Electronics: 21

- COSC 300 - Computer Organization and Assembly Language **Credits: 3**
- MATH 342 - Advanced Mathematics for Applications **Credits: 4**
- PHYS 323
- PHYS 342 - Thermal and Statistical Physics **Credits: 3**
- PHYS 353
- PHYS 432
- PHYS 475

Computer Science: 21

- COSC 300 - Computer Organization and Assembly Language **Credits: 3**
- COSC 410 - Computer Architecture **Credits: 3**
- COSC 450
- MATH 171 - Introduction to Linear Algebra **Credits: 3**
- PHYS 342 - Thermal and Statistical Physics **Credits: 3**
- PHYS 353
- PHYS 432

Chemistry: 19

- CHEM 231 - Organic Chemistry I **Credits: 4**
- CHEM 325 - Analytical Chemistry I **Credits: 4**
- CHEM 341 - Physical Chemistry I **Credits: 4**
- CHEM 343 - Physical Chemistry Laboratory I **Credits: 1**
- MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits: 3**

Biology: 19

- BIOL 201 - Principles of Ecology and Evolution **Credits: 4**
- BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**
- CHEM 231 - Organic Chemistry I **Credits: 4**
- CHEM 351 - Biochemistry **Credits: 4**

One Course from

- BIOL 203 - Principles of Genetics and Development **Credits: 4**
- BIOL 250 - Principles of Microbiology **Credits: 4**
- BIOL 401 - Laboratory Methods in Biology and Biotechnology **Credits: 3**

Geoscience: 21

- GEOS 201 - Foundations of Geology **Credits: 4**
- GEOS 202 - Quantitative Methods in the Geoscience **Credits: 2**
- GEOS 203 - Surficial Processes **Credits: 4**
- GEOS 341 - Planetary Geology **Credits: 4**
- GEOS 342 - Stellar Astronomy **Credits: 4**
- GEOS 371 - Meteorology **Credits: 3**

Other Requirements: 17-23

- CHEM 111 - General Chemistry I **Credits: 4**
- CHEM 112 - General Chemistry II **Credits: 4**
- COSC 110 - Problem Solving and Structured Programming **Credits: 3**
- COSC 343 - Introduction to Numerical Methods **Credits: 3**
- MATH 341 - Differential Equations **Credits: 3**

Foreign Language Intermediate Level: 0-6

(2)

Free Electives: 4-12

Total Degree Requirements: 120

(1) Credits are counted in the Liberal Studies natural science requirement.

(2) Six credits of computer programming will substitute for the foreign language requirement: COSC 110, COSC 210, or higher-level computer science courses (COSC 343 recommended), with department permission.

Nanomanufacturing Technology Track, Physics, BS

Students in the **BS—Physics/Nanomanufacturing Technology Track (NMT)** take one semester of experiential learning in the high-tech field of semiconductor device manufacturing at the state-of-the-art facility at Penn State—University Park Campus. Students must earn a GPA of at least 3.0 in the required science and mathematics courses to be considered for admission into the capstone semester at Penn State. Graduates of the BS—Physics/ NMT may enter careers in industry and education.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

- MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3**

Natural Science:

- PHYS 131 - Physics I-C Lecture **Credits: 3**
- PHYS 141 - Physics I-C Lab **Credits: 1**
- PHYS 132 - Physics II-C Lecture **Credits: 3**
- PHYS 142 - Physics II-C Lab **Credits: 1**

Liberal Studies Elective: 3

- MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3**
- No courses with PHYS prefix

Major: 46

Required Courses:

- PHYS 131 - Physics I-C Lecture **Credits: 3 (1)**
- PHYS 132 - Physics II-C Lecture **Credits: 3 (1)**
- PHYS 141 - Physics I-C Lab **Credits: 1 (1)**
- PHYS 142 - Physics II-C Lab **Credits: 1 (1)**
- PHYS 331 - Modern Physics **Credits: 3**
- PHYS 345 - Optics **Credits: 3**
- PHYS 441 - Classical Mechanics **Credits: 3**
- PHYS 451 - Electricity and Magnetism **Credits: 3**

Required PSU Capstone Courses:

- NMTT 311 - Materials, Safety, and Equipment Overview for Nanofabrication **Credits: 3**
- NMTT 312 - Basic Nanofabrication Processes **Credits: 3**
- NMTT 313 - Thin Films in Nanofabrication **Credits: 3**
- NMTT 314 - Lithography and Patterning Techniques **Credits: 3**
- NMTT 315 - Materials Modifications in Nanofabrication **Credits: 3**
- NMTT 316 - Characterization, Packaging, and Testing of Nanofabrication Structures **Credits: 3**

Additional Required Physics Courses:

- PHYS 231 - Electronics **Credits: 4**
- PHYS 350 - Intermediate Experimental Physics I **Credits: 3**
- PHYS 355 - Computer Interfacing **Credits: 3**
- PHYS 475 - Physics of Semiconductor Devices I **Credits: 3**
- PHYS 476 - Physics of Semiconductor Devices II **Credits: 3**

Other Requirements: 27-23

- CHEM 111 - General Chemistry I **Credits: 4**
- CHEM 112 - General Chemistry II **Credits: 4**
- COSC 110 - Problem Solving and Structured Programming **Credits: 3**
- COSC 343 - Introduction to Numerical Methods **Credits: 3**

Foreign Language Intermediate Level: 0-6

(2)

Free Electives: 7-13

Total Degree Requirements: 120

(1) Credits are counted in the Liberal Studies natural science requirement.

(2) Six credits of computer programming will substitute for the foreign language requirement: COSC 110, COSC 210, or higher-level computer science courses (COSC 343 recommended), with department permission.

Physics, BS

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

- MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3**

Natural Science:

- PHYS 131 - Physics I-C Lecture **Credits: 3**
- PHYS 141 - Physics I-C Lab **Credits: 1**
- PHYS 132 - Physics II-C Lecture **Credits: 3**
- PHYS 142 - Physics II-C Lab **Credits: 1**

Liberal Studies Elective: 3

- MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3**
- No courses with PHYS prefix

Major: 34

Required Courses:

- PHYS 131 - Physics I-C Lecture **Credits:** 3 (1)
- PHYS 132 - Physics II-C Lecture **Credits:** 3 (1)
- PHYS 141 - Physics I-C Lab **Credits:** 1 (1)
- PHYS 142 - Physics II-C Lab **Credits:** 1 (1)
- PHYS 331 - Modern Physics **Credits:** 3
- PHYS 345 - Optics **Credits:** 3
- PHYS 441 - Classical Mechanics **Credits:** 3
- PHYS 451 - Electricity and Magnetism **Credits:** 3

Additional Required Courses

- PHYS 231 - Electronics **Credits:** 4
- PHYS 342 - Thermal and Statistical Physics **Credits:** 3
- PHYS 350 - Intermediate Experimental Physics I **Credits:** 3
- PHYS 401 - Theoretical Physics **Credits:** 3
- PHYS 461 - Quantum Mechanics I **Credits:** 3

One Course from the Following: 3

- PHYS 472 - Nuclear Physics **Credits:** 3
- or
- PHYS 490

PHYS Majors Course: 3

One additional PHYS Majors Course: 3

Other Requirements: 16-22

- COSC 110 - Problem Solving and Structured Programming **Credits:** 3
- MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits:** 3
- MATH 341 - Differential Equations **Credits:** 3
- MATH 342 - Advanced Mathematics for Applications **Credits:** 4

One Course from the Following:

- COSC 343 - Introduction to Numerical Methods **Credits:** 3
- MATH 171 - Introduction to Linear Algebra **Credits:** 3
- MATH 363 - Mathematical Statistics I **Credits:** 3
- MATH 421 - Advanced Calculus I **Credits:** 3
- MATH 423 - Complex Variables **Credits:** 3

Foreign Language Intermediate Level: 0-6

(2)

Free Electives: 20-26

Total Degree Requirements: 120

(1) Credits are counted in the Liberal Studies natural science requirement.

(2) Six credits of computer programming will substitute for the foreign language requirement: COSC 110, COSC 210, or higher-level computer science courses (COSC 343 recommended), with department permission.

Pre-engineering Track, Physics, BS

The **BS—Physics/Pre-engineering Track** is designed to prepare students for admission to engineering school. The student transfers to the affiliated engineering school after appropriate IUP course work has been completed. When sufficient credit from the affiliated engineering school has been earned, the student transfers the credit back to IUP to earn the bachelor of science degree.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

- MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3**

Natural Science:

- PHYS 131 - Physics I-C Lecture **Credits: 3**
- PHYS 141 - Physics I-C Lab **Credits: 1**
- PHYS 132 - Physics II-C Lecture **Credits: 3**
- PHYS 142 - Physics II-C Lab **Credits: 1**

Liberal Studies Elective: 3

- MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3**
- No courses with PHYS prefix

Major: 34

Required Courses:

- PHYS 131 - Physics I-C Lecture **Credits: 3 (1)**
- PHYS 132 - Physics II-C Lecture **Credits: 3 (1)**
- PHYS 141 - Physics I-C Lab **Credits: 1 (1)**
- PHYS 142 - Physics II-C Lab **Credits: 1 (1)**
- PHYS 331 - Modern Physics **Credits: 3**
- PHYS 345 - Optics **Credits: 3**
- PHYS 441 - Classical Mechanics **Credits: 3**
- PHYS 451 - Electricity and Magnetism **Credits: 3**

Additional Required Physics Courses:

(2)

- PHYS 231 - Electronics **Credits:** 4
- PHYS 342 - Thermal and Statistical Physics **Credits:** 3
- PHYS 350 - Intermediate Experimental Physics I **Credits:** 3
- PHYS 355 - Computer Interfacing **Credits:** 3
- PHYS 401 - Theoretical Physics **Credits:** 3
- PHYS 461 - Quantum Mechanics I **Credits:** 3
- PHYS 472 - Nuclear Physics **Credits:** 3
- or
- PHYS 490

Controlled Electives: 6-8

As required per engineering program:

Chemical Engineering:

- CHEM 231 - Organic Chemistry I **Credits:** 4
- CHEM 332 - Organic Chemistry II **Credits:** 4

Civil Engineering:

- MATH 216 - Probability and Statistics for Natural Sciences **Credits:** 3
- Technical elective **Credits:** 3-4

Electrical Engineering:

- MATH 216 - Probability and Statistics for Natural Sciences **Credits:** 3
- Technical elective **Credits:** 3-4

Industrial Engineering:

- MATH 216 - Probability and Statistics for Natural Sciences **Credits:** 3
- Technical elective **Credits:** 3-4

Materials Science and Engineering:

- CHEM 231 - Organic Chemistry I **Credits:** 4
- CHEM 332 - Organic Chemistry II **Credits:** 4

Mechanical Engineering:

- Technical electives **Credits:** 6-8

Other Requirements: 24-30

- CHEM 111 - General Chemistry I **Credits:** 4
- CHEM 112 - General Chemistry II **Credits:** 4
- COSC 110 - Problem Solving and Structured Programming **Credits:** 3
- COSC 343 - Introduction to Numerical Methods **Credits:** 3
- MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits:** 3
- MATH 341 - Differential Equations **Credits:** 3

- MATH 342 - Advanced Mathematics for Applications **Credits: 4**

Foreign Language Intermediate Level: 0-6

(3)

Free Electives: 4-12

(If no automatic transfer into the University of Pittsburgh)

Special Requirements:

Two years at University of Pittsburgh School of Engineering (4)

Total Degree Requirements: 120

(1) Credits are counted in the Liberal Studies natural science requirement.

(2) Some of these courses may be taken at the University of Pittsburgh.

(3) Six credits of computer programming will substitute for the foreign language requirement: COSC 110, COSC 210, or higher-level computer science courses (COSC 343 recommended), with department permission.

(4) A 3.0 cumulative GPA is required for transfer to the University of Pittsburgh. Students transferring to University of Pittsburgh do not need a second writing-intensive class. Students need at most 64 additional credits from the University of Pittsburgh to receive the engineering degree.

(#) See advisory paragraph "Timely Completion of Degree Requirements" in the section on Requirements for Graduation. Students earn two degrees, hence the high credit count.

Bachelor of Science in Education

Physics, BSED

The **BSEd—Physics Education** combines the content knowledge of physics with the pedagogical training offered by the College of Education and Communications to prepare graduates to teach physics as well as science in the secondary school.

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

- MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3**

Natural Science:

- CHEM 111 - General Chemistry I **Credits: 4**

- CHEM 112 - General Chemistry II **Credits: 4**
or
- CHEM 113 - Advanced General Chemistry I **Credits: 4**
- CHEM 114 - Advanced General Chemistry II **Credits: 4**

Social Science:

- PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 6

- MATH 341 - Differential Equations **Credits: 3**
- GEOS 101 - The Dynamic Earth **Credits: 3**
or
- GEOS 103 - Oceans and Atmospheres **Credits: 3**
or
- GEOS 105 - Exploring the Universe **Credits: 3**
- No courses with PHYS prefix

College: 31

Preprofessional Education Sequence:

- ACE 103 - Digital Instructional Technology **Credits: 3**
- EDSP 102 - Educational Psychology **Credits: 3**

Professional Education Sequence:

- EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits: 2**
- EDEX 323 - Instruction of English Language Learners with Special Needs **Credits: 2**
- EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**
- EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**
- EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**
- EDUC 441 - Student Teaching **Credits: 5-12**
- EDUC 442 - School Law **Credits: 1**
- EDUC 451 - Teaching Science in the Secondary School **Credits: 3**

Major: 33

Required Courses:

- PHYS 131 - Physics I-C Lecture **Credits: 3**
- PHYS 132 - Physics II-C Lecture **Credits: 3**
- PHYS 141 - Physics I-C Lab **Credits: 1**
- PHYS 142 - Physics II-C Lab **Credits: 1**
- PHYS 231 - Electronics **Credits: 4**
- PHYS 331 - Modern Physics **Credits: 3**
- PHYS 345 - Optics **Credits: 3**
or

- PHYS 342 - Thermal and Statistical Physics **Credits: 3**
- PHYS 350 - Intermediate Experimental Physics I **Credits: 3**
- PHYS 441 - Classical Mechanics **Credits: 3**
- PHYS 451 - Electricity and Magnetism **Credits: 3**

Controlled Elective: 6

Physics electives—two major courses 200 level or higher

Other Requirements: 10

- BIOL 201 - Principles of Ecology and Evolution **Credits: 4**
or
- BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**
- MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3**
- MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits: 3**

Total Degree Requirements: 121

See advisory paragraph "Timely Completion of Degree Requirements" in the section on Requirements for Graduation.

Minor

Physics Minor

To minor in physics, a student must successfully complete 18-20 credits in physics consisting of at least 6 credits at the 300 level or higher.

Required Courses: 8

- PHYS 131 - Physics I-C Lecture **Credits: 3**
or
- PHYS 111 - Physics I Lecture **Credits: 3**
- PHYS 141 - Physics I-C Lab **Credits: 1**
or
- PHYS 121 - Physics I Lab **Credits: 1**
- PHYS 132 - Physics II-C Lecture **Credits: 3**
or
- PHYS 112 - Physics II Lecture **Credits: 3**
- PHYS 142 - Physics II-C Lab **Credits: 1**
or
- PHYS 122 - Physics II Lab **Credits: 1**

Additional Elective Courses: 12

At least 10 credits from the following, 6cr of which must be at 300 level or higher: (1)

- PHYS 231 - Electronics **Credits: 4**
- PHYS 331 - Modern Physics **Credits: 3**
- PHYS 342 - Thermal and Statistical Physics **Credits: 3**
- PHYS 355 - Computer Interfacing **Credits: 3**

Total Minor Requirements: 18-20

(1) Other courses may be considered with department recommendation.

Psychology

Website: www.iup.edu/psychology

Lisa C. Newell, Chair

The program in psychology leads to a Bachelor of Arts degree and is designed to give students an understanding of the methods and major findings in the science of behavior and mental processes. The major offers the background required for graduate work in psychology and also preparation for such related fields as social work, business, medicine, marketing, law, criminal justice, and education. Psychology majors select one of two specializations, which allows them to tailor their educational experience to their own goals and interests. The department also offers a psychology minor.

Qualified psychology majors are invited to apply for admission to an honors program that offers enriching educational experiences and assists students in gaining entrance to graduate school. The core for the program is the same as for the psychology major; special seminar classes and independent research experiences culminating in an honors thesis are required.

All psychology majors are required to take a minor or a concentration in another discipline.

Bachelor of Arts

Honors Program in Psychology, Psychology, BA

Liberal Studies: 43-44

As outlined in Liberal Studies Requirements section with the following specifications:

Mathematics:

- MATH 217 - Probability and Statistics **Credits: 3**

Natural Science:

- BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**
recommended
- BIOL 106 - Human Genetics and Health **Credits: 3**
recommended

Social Science:

- PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Elective: 3

- No course with PSYC prefix (1)

Major: 42

Required Courses:

- PSYC 100 - The Psychology Major: Curriculum and Careers **Credits: 1**
- PSYC 102 - Identity and Interactions in a Diverse World **Credits: 2**
- PSYC 200 - Psychological Research I **Credits: 3**
- PSYC 215 - Developmental Psychology **Credits: 3**
- PSYC 225 - Abnormal Psychology **Credits: 3**
- PSYC 235 - Social Psychology **Credits: 3**
- PSYC 245 - Learning and Cognition **Credits: 3**
- PSYC 255 - Biopsychology **Credits: 3**

- PSYC 300 - Psychological Research II: Quantitative Research Methods **Credits: 3**
or
- PSYC 301 - Psychological Research II: Qualitative Research Methods **Credits: 3**

- PSYC 480 - Honors Seminar in Psychology **Credits: 3 (2) (Taken twice for 6 total credits, see footnote)**
- PSYC 483 - Honors Thesis **Credits: 1-6 (3) (Taken twice for 6 total credits, see footnote)**

Controlled Electives:

Two courses with different course numbers from the following:

- PSYC 415 - Advanced Topics in Developmental Psychology **Credits: 3**
- PSYC 435 - Advanced Topics in Social Psychology **Credits: 3**
- PSYC 445 - Advanced Topics in Learning and Cognition **Credits: 3**
- PSYC 450 - Counseling Skills **Credits: 3**
- PSYC 455 - Advanced Topics in Biological Psychology **Credits: 3**

Other Requirements: 18-24

- Foreign Language Intermediate Level **Credits: 0-6**
- Minor/Concentration (4) **Credits: 18**

Free Electives: 17

Total Degree Requirements: 120

- (1) Intermediate-level foreign language may be included in Liberal Studies electives.
- (2) Students will enroll in PSYC 480 for 3cr in each of two semesters.
- (3) Students will enroll in PSYC 483 for 3cr in each of two semesters.
- (4) Concentration plan developed in consultation with advisor.

Psychology, BA

Liberal Studies: 43-44

As outlined in Liberal Studies Requirements section with the following specifications:

Mathematics:

- MATH 217 - Probability and Statistics **Credits:** 3

Natural Science:

- BIOL 104 - Human Biology: How the Human Body Works **Credits:** 4 recommended
- BIOL 106 - Human Genetics and Health **Credits:** 3 recommended

Social Science:

- PSYC 101 - General Psychology **Credits:** 3

Liberal Studies Elective: 3

- No course with PSYC prefix (1)

Major: 42

Required Courses:

- PSYC 100 - The Psychology Major: Curriculum and Careers **Credits:** 1
- PSYC 102 - Identity and Interactions in a Diverse World **Credits:** 2
- PSYC 200 - Psychological Research I **Credits:** 3
- PSYC 215 - Developmental Psychology **Credits:** 3
- PSYC 225 - Abnormal Psychology **Credits:** 3
- PSYC 235 - Social Psychology **Credits:** 3
- PSYC 245 - Learning and Cognition **Credits:** 3
- PSYC 255 - Biopsychology **Credits:** 3

- PSYC 300 - Psychological Research II: Quantitative Research Methods **Credits:** 3
or
- PSYC 301 - Psychological Research II: Qualitative Research Methods **Credits:** 3

- PSYC 460 - Senior Seminar in Psychology **Credits:** 3

One specialization required: (2)

Psychological Science Specialization: 15

Controlled Electives: 6

Two courses with different course numbers from the following:

- PSYC 415 - Advanced Topics in Developmental Psychology **Credits:** 3
- PSYC 435 - Advanced Topics in Social Psychology **Credits:** 3
- PSYC 445 - Advanced Topics in Learning and Cognition **Credits:** 3
- PSYC 450 - Counseling Skills **Credits:** 3

- PSYC 455 - Advanced Topics in Biological Psychology **Credits: 3**

Three Additional PSYC Electives: 9

Applied Psychology Specialization: 15

- PSYC 150 - Introduction to Applied Psychology **Credits: 3**
- PSYC 390 - Industrial-Organizational Psychology **Credits: 3**
or
- PSYC 450 - Counseling Skills **Credits: 3**
- PSYC 493 - Psychological Practicum **Credits: 1-12 (3 cr. needed)**

Controlled Electives: 6

Two courses from the following:

- PSYC 322 - Violence Across the Life Span **Credits: 3**
- PSYC 325 - Psychological Testing and Measurement **Credits: 3**
- PSYC 331 - Environmental Psychology **Credits: 3**
- PSYC 332 - Community Psychology and Prevention Science (CAAST) **Credits: 3**
- PSYC 372 - Drugs and Behavior **Credits: 3**
- PSYC 374 - Stress and Coping **Credits: 3**
- PSYC 377 - Interpersonal Skills and Group Dynamics **Credits: 3**
- PSYC 378 - Psychology of Death and Dying **Credits: 3**
- PSYC 388 - Forensic Psychology **Credits: 3**

Other Requirements: 18-24

- Foreign Language Intermediate Level **Credits: 0-6**
- Minor/concentration (3) **Credits: 18**

Free Electives: 10-17

Total Degree Requirements: 120

(1) Intermediate-level foreign language may be included in Liberal Studies electives.

(2) Specialization selected in consultation with advisor.

(3) Concentration plan developed in consultation with advisor.

Minor

Psychology Minor

Required Courses:

- PSYC 101 - General Psychology **Credits: 3 (1)**

- PSYC 200 - Psychological Research I **Credits:** 3 (2)
or
- PSYC 280 - Psychological Inquiry **Credits:** 3
- Four other PSYC electives beyond PSYC 101 (3,4)

Total Minor Requirements: 18

- (1) Meets Liberal Studies requirement.
- (2) Prerequisite: Grade of C or better in MATH 217.
- (3) Selected in consultation with the minor advisor.
- (4) At least six credits must be at the 300-level or higher.

Other Programs

Bachelor of Science

Environmental Engineering, BS

Advisor: Sajad Hamidi, Hau Tang

Environmental Engineering is a multi-disciplinary program that prepares students to work to minimize the impact of human development and technology on the natural world. Their interests include water purification, pollution control, public health, recycling, waste disposal, and sustainable design and manufacturing. Graduates trained in basic sciences and mathematics will use the principles of engineering, geosciences, chemistry, biology, and physics to develop solutions to environmental problems. This degree program combines a solid grounding in college-level basic sciences and mathematics with environmental engineering and technical courses.

Graduates of the BS program in Environmental Engineering will be qualified to enter the workforce immediately or to further their educations in master's or doctoral programs. The degree program will prepare students to apply mathematical and scientific principles to the design, development, and operational evaluation of systems for controlling contained living environments and for monitoring and controlling factors in the external natural environment, including pollution control, waste and hazardous material disposal, health and safety protection, conservation, life support, and requirements for protection of special materials and related work environments.

Graduates of this program will possess the technical expertise required to maintain a healthy balance between societal welfare, economic growth, and the environment surrounding us, and will be in demand in the Pennsylvania workforce where the need for environmental engineers is projected to grow faster than other occupations.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities:

- PHIL 122 - Contemporary Moral Issues **Credits:** 3

Mathematics:

- MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits:** 3

Natural Science:

- CHEM 111 - General Chemistry I **Credits: 4**
- CHEM 112 - General Chemistry II **Credits: 4**
- or
- CHEM 113 - Advanced General Chemistry I **Credits: 4**
- CHEM 114 - Advanced General Chemistry II **Credits: 4**

Social Science:

- ECON 101 - Basic Economics **Credits: 3**
- RGPL 103 - Global Cities: Planning and Development **Credits: 3**
- or
- GEOG 104 - World Geography: Global Context **Credits: 3**

Liberal Studies Electives: 3

- MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3**

Major: 58

Required Courses:

- BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**
- GEOS 201 - Foundations of Geology **Credits: 4**
- MATH 171 - Introduction to Linear Algebra **Credits: 3**
- MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**
- MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits: 3**
- MATH 341 - Differential Equations **Credits: 3**
- PHYS 131 - Physics I-C Lecture **Credits: 3**
- PHYS 132 - Physics II-C Lecture **Credits: 3**
- PHYS 141 - Physics I-C Lab **Credits: 1**
- PHYS 142 - Physics II-C Lab **Credits: 1**

Environmental Engineering Core:

- ECON 361 - Environmental Economics **Credits: 3**
- ENVE 101 - Introduction to Environmental Engineering **Credits: 3**
- ENVE 201 - Fluid Mechanics **Credits: 3**
- ENVE 211 - Statics and Solid Mechanics **Credits: 3**
- ENVE 301 - Environmental Aquatic Chemistry **Credits: 4**
- ENVE 311 - Water Resources Engineering **Credits: 4**
- ENVE 461 - Water and Wastewater Treatment **Credits: 3**
- ENVE 471 - Solid and Hazardous Waste Management **Credits: 3**
- ENVE 498 - Environmental Engineering **Credits: 3**
- SAFE 435 - Ethics and Professionalism **Credits: 1**

Free Electives: 18

Recommended

- BIOL 221 - Environmental Health and Protection **Credits: 4**

- BIOL 250 - Principles of Microbiology **Credits: 4**
- BIOL 323 - Introduction to Toxicology and Risk Assessment **Credits: 3**
- BIOL 401 - Laboratory Methods in Biology and Biotechnology **Credits: 3**
- CHEM 231 - Organic Chemistry I **Credits: 4**
- CHEM 325 - Analytical Chemistry I **Credits: 4**
- CHEM 351 - Biochemistry **Credits: 4**
- COSC 110 - Problem Solving and Structured Programming **Credits: 3**
- COSC 250
- GEOG 316 - Introduction to Geographic Information Systems **Credits: 3**
- GEOG 415 - Introduction to Remote Sensing **Credits: 3**
- GEOG 419 - Geographic Information Systems (GIS) for Environmental Applications **Credits: 3**
- GEOS 312 - Hydrogeology **Credits: 4**
- IFMG 110 - Business Spreadsheet Computing **Credits: 3**
- IFMG 250 - Business Systems Technology **Credits: 3**
- MATH 342 - Advanced Mathematics for Applications **Credits: 4**
- SAFE 310 - Environmental Safety and Health Regulations and Sustainability **Credits: 3**
- SAFE 361 - Air and Water Pollution **Credits: 2**
- Foreign language intermediate sequence **Credits: 6**

Total Degree Requirements: 120

Programs of Study

Associate in Applied Science

Baking and Pastry Arts, AAS

Website: www.iup.edu/culinary

Lynn A. Pike, Chair

The Department of Culinary Arts offers a five-semester Associate in Applied Science Degree in Culinary Arts and a five-semester associate in Applied Science in Baking and Pastry Arts. These distinctive programs combine hands-on learning experiences in the kitchen laboratory, instruction in fundamental culinary and baking and pastry theory, liberal studies coursework, and a paid externship in the industry to provide each student with the necessary skills and knowledge to begin a successful career in the field of culinary arts or baking and pastry arts. The program consists of the 16-month, competency-based culinary arts or baking and pastry arts curriculum, plus an additional 12 credits of Liberal Studies requirements.

This contemporary approach to learning enables students to achieve advanced levels of proficiency in culinary and/or baking and pastry techniques and business management skills combined with a basic foundation of liberal arts knowledge.

Liberal Studies: 21-22

As outlined in Liberal Studies Requirements with the following specifications:

Mathematics: 3

MATH 101 - Foundations of Mathematics **Credits: 3**

(1)

English: 3

ENGL 101 - Composition I **Credits: 3**

Natural Science: 3-4

Lab or Non-Lab Science

Social Science: 3

Humanities: 3

HIST 196 - Explorations in US History **Credits: 3**

HIST 197 - Explorations in European History **Credits: 3**

HIST 198 - Explorations in Global History **Credits: 3**

ENGL 121 - Humanities Literature **Credits: 3**

PHIL/RLST course

Liberal Studies Electives: 6

(2,3)

COSC 101 - Computer Literacy **Credits: 3**

or

IFMG 101 - Computer Literacy **Credits: 3**

FDNT 143 - Current Issues in Nutrition and Wellness **Credits: 3**

Major Baking and Pastry Arts:

Required Courses: 39

Completion of Baking and Pastry program coursework and externship

Total Degree Requirements: 60-61

(1) CMGT 1200 is established as equivalent to MATH 101

(2) CMGT 1301 established as equivalent to LS Electives FDNT 145

(3) COMP 1000 and COMP 2000 are established as equivalent to COSC/IFMG 101

Culinary Arts, AAS

Website: www.iup.edu/culinary

Lynn A. Pike, Chair

The Department of Culinary Arts offers a five-semester Associate in Applied Science Degree in Culinary Arts and a five-semester associate in Applied Science in Baking and Pastry Arts. These distinctive programs combine hands-on learning experiences in the kitchen laboratory, instruction in fundamental culinary and baking and pastry theory, liberal studies coursework, and a paid externship in the industry to provide each student with the necessary skills and knowledge to begin a successful career in the field of culinary arts or baking and pastry arts. The program consists of the 16-month, competency-based culinary arts or baking and pastry arts curriculum, plus an additional 12 credits of Liberal Studies requirements.

This contemporary approach to learning enables students to achieve advanced levels of proficiency in culinary and/or baking and pastry techniques and business management skills combined with a basic foundation of liberal arts knowledge.

Liberal Studies: 21-22

As outlined in the Liberal Studies Requirements with the following specifications:

English:

ENGL 101 - Composition I **Credits: 3**

Mathematics:

MATH 101 - Foundations of Mathematics **Credits: 3 (1)**

Humanities: 3

HIST 196 - Explorations in US History **Credits: 3**

HIST 197 - Explorations in European History **Credits: 3**

HIST 198 - Explorations in Global History **Credits: 3**

or

ENGL 121 - Humanities Literature **Credits: 3**

or PHIL/RLST course

Natural Science: 3-4

Lab or Non-Lab Science

Social Science: 3

Liberal Studies Electives: 6

(2, 3)

COSC 101 - Computer Literacy **Credits: 3**

or

IFMG 101 - Computer Literacy **Credits: 3**

FDNT 145 - Personal Nutrition **Credits: 3**

Major Culinary Arts:

Required Courses: 39

Completion of Culinary Program Coursework and Externship 9 credits from the Culinary Program will articulate toward the Liberal Studies **requirement.**

The remaining 12-13cr will be completed in one additional semester at the Punxsutawney Regional Campus after successful completion of the Culinary Externship.

Total Degree Requirements: 60

(1) CMGT 1200 is established as equivalent to MATH 101

(2) CMGT 1301 and CKRY 2001 are established as equivalent to LS Elective FDNT 145

(3) COMP 1000 and COMP 2000 are established as equivalent to COSC 101/IFMG 101

Associate of Arts

General Studies, AA

The associate of arts degree program with a major in general studies is designed to provide the student with a broad base of knowledge in liberal studies with a focused concentration in a field of study at IUP. The program is available in a format of either a traditional classroom or online instruction. The required concentration may include the already approved courses of an established minor program or a set of pre-approved courses to satisfy the 18-credit concentration. No more than 30 credits may be transferred into this degree program from other colleges or universities.

Students who may find this degree appropriate are those whose career goals only require an associate of arts degree, who are distance education students, who need a degree credential in route to a bachelor's degree, or who are unable to complete a bachelor's degree, but seek a degree that can accurately reflect their accomplishments in college.

Liberal Studies: 39-40

As outlined in the Liberal Studies Requirements with the following specifications:

Fine Arts: 3

Dimensions of Wellness/ROTC: 3

Humanities: 9

Learning Skills: 6

ENGL 101 - Composition I **Credits:** 3 or higher

MATH 101 - Foundations of Mathematics **Credits:** 3 or higher

Natural Science: 6-7

Social Science: 6

(1)

Liberal Studies Electives: 6

Concentration: 18

Completion of an approved minor or pre-approved set of courses

Free Electives: 2-3

Total Degree Requirements: 60

(1) A 3cr course in Global and Multicultural Awareness must be taken.

Associate of Science

Hospitality Management, AS

Hospitality Management Associate graduates are successful, competent, and well prepared. Entry-level management careers and exciting employment opportunities await either as an entrepreneur or within the larger global operational systems, including corporate support centers, supply chain and logistics management, restaurants, tourism, special events, hotels, resorts, clubs and beverage operations, theme parks, contract food services, gaming operations, catering, cruise lines, and other travel-related venues and operations. The program is accredited by the Accreditation Commission for Programs in Hospitality Administration. Continuation in the Bachelor of Science Degree in Hospitality Management is encouraged.

Liberal Studies: 24

As outlined in the Liberal Studies Requirements section with the following specifications:

Learning Skills: 6

ENGL 101 - Composition I **Credits: 3**

MATH 101 - Foundations of Mathematics **Credits: 3 or higher**

Fine Arts: 3

Humanities: 9

HIST 196 - Explorations in US History **Credits: 3**

or

HIST 197 - Explorations in European History **Credits: 3**

or

HIST 198 - Explorations in Global History **Credits: 3**

ENGL 121 - Humanities Literature **Credits: 3**

Philosophy/Religious Studies:

Natural Science: 3

Non-Lab Science

Social Science: 3

ECON 101 - Basic Economics **Credits: 3**

or

ECON 121 - Principles of Macroeconomics **Credits: 3**

Hospitality Core: 36

HOSP 101 - Introduction to the Hospitality Industry **Credits: 1**

HOSP 130 - Food Service Sanitation **Credits: 1**

HOSP 150 - Principles of Hospitality Management **Credits: 3**

HOSP 220 - Food Service Operations **Credits: 3**

HOSP 256 - Human Resources in the Hospitality Industry **Credits: 3**

HOSP 259 - Hospitality Purchasing **Credits: 3**

HOSP 260 - Hotel Operations Management **Credits: 3**

HOSP 265 - Hospitality Cost Management **Credits: 3**

HOSP 310 - Professional Development in the Hospitality Industry **Credits: 3**

HOSP 320 - Hospitality Marketing **Credits: 3**

HOSP 330 - Applications of Food Production and Service **Credits: 4**

HOSP 335 - Legal Issues in Hospitality **Credits: 3**

HOSP 493 - Internship **Credits: 3**

HOSP 393 - Exploratory Hospitality Field Experience **Credits: 3-12**

Total Degree Requirements: 60

Bachelor of Arts

Applied Anthropology Track, Anthropology, BA

Applied anthropology focuses on the anthropologist as an agent of social change and bridges the gap between theories of cultural behavior and the policies that affect contemporary cultures. The Applied Anthropology Track provides students with a background in anthropological method and theory, a cross-cultural perspective, and an avenue to translate this knowledge into action through internships and research. Contemporary applied anthropologists work in international development, health, human rights, business and marketing, the environment, education, and as advocates for marginalized communities. In consultation with an advisor, each student will develop their own curriculum to build expertise in a specific topical area.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 217 - Probability and Statistics **Credits: 3**

Social Science:

GEOG 104 - World Geography: Global Context **Credits: 3** (recommended)

Liberal Studies Electives: 6

No courses with ANTH prefix

College: 0-8

Foreign Language Intermediate Level (1)

Major: 36

Required Courses:

ANTH 211 - Cultural Anthropology **Credits: 3**

ANTH 222 - Biological Anthropology **Credits: 3**

ANTH 233 - Language and Culture **Credits: 3**

ANTH 244 - Basic Archaeology **Credits: 3**

Two methods courses:

ANTH 456 - Ethnographic Research Methods **Credits: 3**

ANTH 457 - Applied Anthropology **Credits: 3**

One theory course:

ANTH 480 - Anthropology Seminar **Credits:** 1-3

Controlled Electives:

One area course from the following:

ANTH 271 - Cultural Area Studies: Africa **Credits:** 3

ANTH 272 - Culture Area: China **Credits:** 3

ANTH 274 - Cultural Area Studies: Latin America **Credits:** 3

ANTH 314 - Contemporary Native American Cultures **Credits:** 3

ANTH 370 - Latinos and Diasporas **Credits:** 3

One ANTH elective (any level) **Credits:** 3

One ANTH elective (300-400 level) **Credits:** 3

ANTH 493 - Internship in Anthropology **Credits:** 3-12 (2)

or

ANTH 460 - Ethnographic Field School **Credits:** 6 (2)

Free Electives: 26-38

(3)

Total Degree Requirements: 120

(1) Intermediate-level foreign language may be included in Liberal Studies electives.

(2) An internship or ethnographic field school is highly desirable but may be replaced by 3-6cr of pragmatic skill courses upon approval of the advisor.

(3) State System Board of Governors policy states that at least 40 percent of the course work in a degree must consist of courses numbered 300 and above.

Archaeology Track, Anthropology, BA

The Archaeology Track provides an emphasis on the study of culture through the material remains of human behavior. This track provides training for careers in the growing fields of cultural resource management and historic preservation, with opportunities for employment in both government and the private sector. This track is the preferred option for students intending to pursue archaeology at the graduate level as well. Students in this track take archaeological methods, theory, and area courses as well as anthropology core courses and electives. A wide variety of internship opportunities provide hands-on training in these areas.

Liberal Studies: 46-47

As outlined in Liberal Studies Requirements with the following specifications

Mathematics:

MATH 217 - Probability and Statistics **Credits:** 3

Natural Science:

Geoscience courses recommended (1)

Social Science:

ANTH 213 - World Archaeology **Credits:** 3 (required)
GEOG 104 - World Geography: Global Context **Credits:** 3 (recommended)

Liberal Studies Electives: 6

No courses with ANTH prefix

College: 0-8

Foreign Language Intermediate Level (2)

Major: 36

Required Courses:

ANTH 211 - Cultural Anthropology **Credits:** 3
ANTH 213 - World Archaeology **Credits:** 3
ANTH 222 - Biological Anthropology **Credits:** 3
ANTH 233 - Language and Culture **Credits:** 3
ANTH 244 - Basic Archaeology **Credits:** 3

Controlled Electives:

Three Methods Courses:

ANTH 320 - Archaeological Field School **Credits:** 6 (4, 5)
ANTH 325 - Archaeological Lab Methods **Credits:** 3
ANTH 415 - Cultural Resource Management **Credits:** 3

Two Theory Courses:

ANTH 425 - Archaeological Theory and Research Design **Credits:** 3
ANTH 480 - Anthropology Seminar **Credits:** 1-3

One Archaeology Area Course

Such as

ANTH 315 - North American Archaeology **Credits:** 3
ANTH 323 - Mesoamerican Archaeology **Credits:** 3
ANTH 333 - The Archaeology of Early China **Credits:** 3

Any Two Anthropology Courses from the Following:

ANTH 250 - Human Origins **Credits:** 3
ANTH 271 - Cultural Area Studies: Africa **Credits:** 3
ANTH 272 - Culture Area: China **Credits:** 3
ANTH 274 - Cultural Area Studies: Latin America **Credits:** 3
ANTH 310 - Voyages of Discovery **Credits:** 3
ANTH 314 - Contemporary Native American Cultures **Credits:** 3

- ANTH 318 - Museum Methods **Credits: 3**
- ANTH 370 - Latinos and Diasporas **Credits: 3**
- ANTH 420 - Environmental Anthropology **Credits: 3**
- ANTH 470 - Environmental Archaeology **Credits: 3**
- ANTH 484 - Specialized Methods in Archaeology **Credits: 3 (5)**
- ANTH 486 - Historic Artifacts **Credits: 3**
- ANTH 487 - Geoarchaeology **Credits: 3**
- ANTH 488 - Geophysical Applications in Archaeology **Credits: 3**
- ANTH 489 - Prehistoric Technologies of Eastern North America **Credits: 3**
- ANTH 490 - Applied Spatial Methods in Archaeology **Credits: 3**
- ANTH 491 - Zooarchaeology **Credits: 3**
- ANTH 492 - Soil Science: Archaeological and Geoenvironmental Applications **Credits: 3**
- ANTH 496 - Human Osteology **Credits: 3**
- ANTH 497 - Forensic Anthropology **Credits: 3**

Free Electives: 29-38

(6, 7)

Total Degree Requirements: 120

- (1) Determine the specific courses in consultation with academic advisor.
- (2) Intermediate-level foreign language may be included in Liberal Studies electives.
- (3) Courses counted toward Liberal Studies credits do not receive duplicate credit in major.
- (4) With department approval, an equivalent field school with lab component from another university may be used.
- (5) May be repeated for credit with departmental approval but may only count once toward the requirements of the Archaeology Track.
- (6) A minor in geoscience, geography, history, or other approved field is recommended. An internship (ANTH 493) also is recommended. The student's advisor should be consulted.
- (7) State System Board of Governors policy states that at least 40 percent of the course work in a degree must consist of courses numbered 300 or above.

Asian Studies, BA

Alan T. Baumler, Coordinator

The Committee of Asian Studies offers an interdisciplinary major and a minor to provide students with the opportunity to increase their knowledge of the world's largest, most populous, and most diverse continent. Students enrolled in the Asian studies major or minor will find that the course offerings furnish excellent preparation for careers in business, government, journalism and public relations, and teaching.

To complete the Asian studies major, a student must take a minimum of 33 credits in courses dealing with Asia. All Asian studies majors must take ASIA 200 and must demonstrate at least an intermediate-level proficiency in an Asian language, doing so either by passing the intermediate sequence of one of the Asian languages offered at IUP or by demonstrating that they have acquired the equivalent proficiency level elsewhere. The remaining courses should come from "Category A: Exclusively Asia-Focused." Students may, but do not have to, apply up to three credits from "Category B: Substantially Asia-Focused" to their degree. It is highly recommended that students complement their Asian studies degree with a minor or second major, preferably in such fields as anthropology, economics, fine arts, geography, history, international business, international studies, journalism and public relations, political science, or religious studies.

Liberal Studies: 43-44

As outlined in Liberal Studies Requirements with the following specifications:

Mathematics: 3

Liberal Studies Elective: 3

No courses with CHIN or JAPN prefixes

Major: 33-34

Required Course: 3

ASIA 200 - Introduction to Asian Studies **Credits: 3**

Controlled Electives: 30cr

(1)

Intermediate Asian language: 0-4cr

(2)

CHIN 201 - Intermediate Chinese **Credits: 4**

CRLG 251 - Arabic IV **Credits: 3**

CRLG 255 - Hindi IV **Credits: 3**

JAPN 201 - Intermediate Japanese **Credits: 4**

KORE 201 - Intermediate Korean **Credits: 4**

Category A: Exclusively Asia-Focused: 24-30cr

(3, 4)

At least 24cr earned through the following courses:

ANTH 272 - Culture Area: China **Credits: 3**

ANTH 333 - The Archaeology of Early China **Credits: 3**

ARHI 224 - Introduction to Asian Art **Credits: 3**

ARHI 423 - Art of Japan **Credits: 3**

ARHI 424 - Art of India and Southeast Asia **Credits: 3**

ARHI 425 - Arts of China **Credits: 3**

ARHI 427 - Japanese Narrative Art **Credits: 3**

GEOG 257 - Geography of South and Southwest Asia **Credits: 3**

HIST 106 - Samurai and Gongfu Heroes: Masculinity in East Asia **Credits: 3**

or

ASIA 106 - Samurai and Gongfu Heroes: Masculinity in East Asia **Credits: 3**

HIST 206 - The History of East Asia **Credits: 3**

HIST 331 - Modern Middle East **Credits: 3**

HIST 332 - History of Early China **Credits: 3**

HIST 338 - The History of Iran **Credits: 3**

HIST 339 - Jihad and the Origins of Islamist Movements in the Middle East **Credits: 3**

or

PLSC 339 - Jihad and the Origins of Islamist Movements in the Middle East **Credits: 3**

HIST 433 - China 1300-1800: The Late Imperial Age **Credits: 3**

HIST 434 - Modern China 1800-present **Credits: 3**

HIST 436 - Japan 1500-1850: Early Modern Japan **Credits: 3**

HIST 437 - Modern Japan 1850-Present **Credits: 3**

PLSC 383 - Political Systems: Asia **Credits: 3**
PLSC 384 - Political Systems: Middle East **Credits: 3**
RLST 311 - Eastern Philosophy **Credits: 3**
RLST 370 - Religions: China and Japan **Credits: 3**
RLST 374 - Buddhism **Credits: 3**
RLST 375 - Religions of India **Credits: 3**
RLST 378 - Hinduism **Credits: 3**
RLST 380 - Islam **Credits: 3**
RLST 402 - Topics in Asian Religions **Credits: 3**

Category B: Substantially Asia-Focused 0-3cr

(3, 4, 5)

ARHI 321 - History of World Ceramics **Credits: 3**
BCOM 342 - Intercultural Business Communication **Credits: 3**
ECON 339 - Economic Development I **Credits: 3**

GEOG 104 - World Geography: Global Context **Credits: 3**
GEOG 254 - Geography of Russia, Central Eurasia, and Eastern Europe **Credits: 3**
MGMT 459 - Seminar in International Management **Credits: 3**
PLSC 101 - World Politics **Credits: 3**
PLSC 285 - Comparative Government II: Non-Western Political Systems **Credits: 3**
RLST 110 - World Religions **Credits: 3**

Free Electives: 42-44

Total Degree Requirements: 120

- (1) At least 12cr must be at the 300 level or higher.
- (2) A student who has acquired an intermediate level of proficiency in an Asian language, but not through an accredited college program, may apply to the Asian Studies Committee to be exempt from 3cr in intermediate language instruction. Such credits in these cases are to be replaced by taking one additional Category A class. Students who take advanced-level Asian language courses at IUP or another university may apply to the program director to have such credits partially fulfill the Category A requirements.
- (3) Unless given special permission by the Asian Studies Committee, no more than 9cr of courses with the same departmental prefix may count toward the major.
- (4) The subject matter varies in rotating topic courses (e.g., HIST 497, RLST 485 etc.); and special topics courses (i.e. classes numbered 281 and 481). When concerned with Asian Studies, these courses may be applied to either Category A or Category B with the approval of the Asian Studies Committee.
- (5) Certain courses may require additional prerequisites

For further information on the Asian Studies programs, contact the College of Humanities and Social Sciences, 201 McElhaney Hall, 724-357-2280.

Biology, BA

The Bachelor of Arts degree program in biology is designed for students who wish to combine a primary academic interest in biology with additional training in a complementary field. This curriculum allows the greatest overall flexibility in a student's program of study by providing them with the opportunity to earn a minor in their complementary field as well as a second minor through their free electives. The primary biology major combined with two minors can make an attractive educational package for the student and for potential employers. Examples of complementary fields that might enhance a student's competitiveness in the job market include anthropology, business administration, criminology, economics, foreign language, LGBT&Q, marketing, pre-law, psychology, safety sciences, sociology, sustainability, women and gender studies, or others of interest.

Liberal Studies: 44-45

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 105 - College Algebra **Credits: 3**

or

MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**

Natural Science:

CHEM 111 - General Chemistry I **Credits: 4**

CHEM 112 - General Chemistry II **Credits: 4**

Social Science:

one course should also fulfill GMA requirement

Liberal Studies Elective: 3

MATH 217 - Probability and Statistics **Credits: 3**

Major: 37

Required Core Courses:

BIOL 201 - Principles of Ecology and Evolution **Credits: 4**

BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**

BIOL 203 - Principles of Genetics and Development **Credits: 4**

Controlled Electives: 21

Biology major courses only (1, 2)

Other Requirements:

PHYS 111 - Physics I Lecture **Credits: 3**

PHYS 121 - Physics I Lab **Credits: 1**

Planned Minor in Complementary Field: 18-20

requires advisor approval (3)

Other Requirements:

Exit survey for assessment purposes

Free Electives: 18-21

(4)

Total Degree Requirements: 120

(1) No more than 6cr total from Independent Study, Special Topics, or Internship applies to major; excess applied as free electives.

(2) No more than 4cr can come from 100-level courses. Excluding prerequisite, cognate, liberal studies, college core courses, no more than two majors' courses can be shared between a major and minor.

(3) Courses appropriate for a Minor in a complementary field of interest should be selected. Please refer to BA-Biology catalog description for details.

(4) Free electives may be used towards a Biology Department Minor such as Animal Behavior, Biomedical Science, Forensic Biosciences, Environmental Microbiology, Neurobiology, Wildlife and Conservation Biology, or other minors of interest.

Computer Science, BA

IUP's computer science programs share a curricular core covering fundamental concepts, programming, problem solving, data structures, algorithms, software engineering, database, and seminars on technical topics and the profession. The department focuses on providing a broad foundation to create agile graduates who can adapt to the rapidly changing trends in the computer science field. Upper-level courses are designed to provide depth of theory and build career skills. Courses held in computer classrooms offer hands-on learning that blends theory with supervised practice to train workforce ready graduates. The Bachelor of Arts in Computer Science program allows greater flexibility by having fewer required courses. Students often choose this track when planning to double major or if they want to tailor their degree program meet specific interests. Graduates leverage their wide scope of knowledge by applying computing skills to fields outside of computer science and are effective in communicating across disciplines and cultural backgrounds.

Students completing the program are prepared to work in computer-dependent areas of business, government, and industry. Recent graduates have started their careers with positions in programming and systems analysis, business applications, computer software development, applied scientific programming, and other computer-related areas.

Liberal Studies: 43-44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3 (1)**

Liberal Studies Elective: 3

MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**
No courses with COSC prefix

Major: 39

Core Courses:

COSC 105 - Fundamentals of Computer Science **Credits: 3**
COSC 110 - Problem Solving and Structured Programming **Credits: 3**
COSC 210 - Object-Oriented and GUI Programming **Credits: 3**
COSC 220 - Applied Computer Programming **Credits: 4**
COSC 300 - Computer Organization and Assembly Language **Credits: 3**
COSC 310 - Data Structures and Algorithms **Credits: 3**

COSC 341 - Introduction to Database Management Systems **Credits: 3**
COSC 380 - Seminar on the Computer Profession and Ethics **Credits: 2**
COSC 480 - Seminar on Technical Topics **Credits: 1**

Controlled Electives:

8cr from the following: (2)

COSC 343 - Introduction to Numerical Methods **Credits: 3**

or

MATH 343 - Introduction to Numerical Methods **Credits: 3**

COSC 216 - Introduction to Cyber Security **Credits: 3** (3)

COSC 319 - Software Engineering Concepts **Credits: 3**

COSC 345 - Computer Networks **Credits: 3**

COSC 355 - Computer Graphics **Credits: 3**

COSC 356 - Network Security **Credits: 3**

COSC 362 - Unix Systems **Credits: 3**

COSC 365 - Web Architecture and Application Development **Credits: 3**

COSC 473 - Software Engineering Practice **Credits: 3** (4)

COSC 482 - Independent Study **Credits: 1-4**

COSC 493 - Internship in Computer Science **Credits: 6-12** (4)

COSC 354

or

IFMG 354

IFMG 455 - Business Data Mining **Credits: 3**

Upper-Level Electives by Categories: 6

(5)

Artificial Intelligence:

COSC 405 - Artificial Intelligence **Credits: 3**

Computer Architecture:

COSC 410 - Computer Architecture **Credits: 3**

Database Management:

COSC 444

Distributed Systems:

COSC 465 - Distributed Processing and Web Services **Credits: 3**

Numerical Methods:

COSC 427 - Introduction to Cryptography **Credits: 3**

Systems Programming:

COSC 430 - Introduction to Systems Programming **Credits: 3**
COSC 432 - Introduction to Operating Systems **Credits: 3**

Theory of Languages:

COSC 420 - Modern Programming Languages **Credits: 3**
COSC 424 - Compiler Construction **Credits: 3**
COSC 460 - Theory of Computation **Credits: 3**

Other Requirements: 3

Additional Mathematics:

MATH 309 - Discrete Mathematics **Credits: 3**

Free Electives: 34-35

Total Degree Requirements: 120

(1) MATH 125 can be substituted by MATH 121.

(2) Upper-level electives may be counted as controlled electives. 3cr of Intermediate Level foreign language may be applied toward controlled electives.

(3) COSC 216 cannot be counted for major credit if a student does a Cyber Security minor.

(4) Credit for both COSC 473 and COSC 493 may be counted toward the degree, but only one will be counted toward the major requirements. **Note:** Only 3cr of first 6cr of COSC 493 or 6cr of a total 12cr of COSC 493 can be counted toward major. COSC 493 may be selected after completion of sophomore year.

(5) Select at least two additional courses, from at least two different categories, from the list of upper-level electives.

Criminology, BA

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 217 - Probability and Statistics **Credits: 3**

Natural Science:

Recommended:

SCI 107 - Chemistry for Everyone **Credits: 3**
SCI 117 - Chemistry for Everyone Laboratory **Credits: 1**
CHEM 105 - The Forensic Chemistry of CSI **Credits: 3**
or
BIOL 106 - Human Genetics and Health **Credits: 3**
BIOL 116 - Human Genetics and Health Laboratory **Credits: 1**

and
BIOL 107 - Introduction to Forensic Biology **Credits: 3**

Social Science:

CRIM 101 - Crime and Justice Systems **Credits: 3**

Liberal Studies Electives: 6

No courses with CRIM prefix

Major: 33

Required Courses:

CRIM 102 - Survey of Criminology **Credits: 3**
CRIM 306 - Criminological Research Methods **Credits: 3**
CRIM 400 - Theoretical Criminology **Credits: 3**
CRIM 401 - Contemporary Issues in Criminology **Credits: 3**
CRIM 403 - Dilemmas in Criminology and Criminal Justice **Credits: 3**

Controlled Electives:

Two courses from each group:

Group A: The Criminal Justice System: 6

CRIM 205 - Policing and the Community **Credits: 3**
CRIM 215 - Survey of Courts and the Criminal Justice System **Credits: 3**
CRIM 225 - Survey of Corrections **Credits: 3**
CRIM 235 - Survey of Juvenile Justice and Juvenile Law **Credits: 3**
CRIM 255 - Law, Social Control, and Society **Credits: 3**

Group B: Critical Issues in Criminology 6

CRIM 344 - Terrorism **Credits: 3**
CRIM 354 - White-Collar Crime **Credits: 3**
CRIM 374 - Environmental Crime and Justice **Credits: 3**
CRIM 384 - Violence and Victimology **Credits: 3**
CRIM 394 - Crime and Delinquency Prevention **Credits: 3**

Group C: Diversity Issues in Criminology 6

CRIM 410 - Race, Ethnicity, Social Structure, and Crime **Credits: 3**
CRIM 450 - Women and Crime **Credits: 3**
CRIM 470 - Comparative Study of Justice **Credits: 3**

Free Electives: 40-41

(1)

Total Degree Requirements: 120

(1) Completion of a minor is strongly recommended.

Dance Arts Track, Interdisciplinary Fine Arts, BA

The Interdisciplinary Fine Arts major is available for students desiring to combine course work within the departments of Art, Music, and Theatre and Dance and selected courses within other colleges. Students must enter into a college department through an audition. Currently the only Interdisciplinary Fine Arts track available is Dance Arts.

The Interdisciplinary Fine Arts/Dance Arts Track is coordinated by the Director of Dance in the Department of Theatre, Dance and Performance. It focuses on the art of dance by integrating the studio practice and classroom study of dance with a secondary focus on theatre, music, art, and/or specified related studies. Students can be admitted to this track after completion of a dance audition and interview. This track is designed to give each major a well-advised, customized education in preparation for one of the many possible career outcomes within, or related to, the dance discipline.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Fine Arts:

MUHI 101 - Introduction to Music **Credits: 3**

Liberal Studies Electives: 6

No courses with FIAR prefix

Major: 42

(1)

Required Courses:

Dance: 9

DANC 102 - Introduction to Dance **Credits: 3**

DANC 351 - Choreography **Credits: 3**

DANC 355 - Dance Production: Administration to Creation **Credits: 3**

Dance Technique: 21

(1)

DANC 150 - Fundamentals of Dance **Credits: 3**

DANC 250 - Beginning Modern Dance **Credits: 3**

or

DANC 485 - Dance Studio **Credits: 3** (Modern)

DANC 260 - Beginning Jazz Dance **Credits: 3**

or

DANC 485 - Dance Studio **Credits: 3** (Jazz)

DANC 270 - Beginning Ballroom and Tap Dance **Credits: 3**

or

DANC 485 - Dance Studio **Credits:** 3 (Ballroom and Tap)
DANC 280 - Beginning Ballet **Credits:** 3
or
DANC 485 - Dance Studio **Credits:** 3 (Ballet)
DANC 290 - Ethnic Dance **Credits:** 3
THTR 486 - Practicum in Production **Credits:** 0-3 (2)

Theater:

One course from the following:

THTR 116 - Fundamentals of Theatrical Design **Credits:** 3
THTR 122 - Costume Workshop **Credits:** 3
THTR 221 - Basic Stage Lighting **Credits:** 3
THTR 223 - Makeup for the Stage **Credits:** 3

Ensemble/Production/Exhibition Requirements: 2-3

THTR 486 - Practicum in Production **Credits:** 0-3

Controlled Electives: 6-7cr

(as advised)

ART 112 - Fundamentals of Drawing **Credits:** 3
ART 113 - Three-Dimensional Design **Credits:** 3
ART 215 - Sculpture **Credits:** 3
DANC 353 - Dance Curriculum and Instruction **Credits:** 3
DANC 485 - Dance Studio **Credits:** 3 (Modern)
DANC 485 - Dance Studio **Credits:** 3 (Ballet)
DANC 485 - Dance Studio **Credits:** 3 (Ballroom and Tap)
DANC 485 - Dance Studio **Credits:** 3 (Jazz)
FSMR 456 - Historic Costume **Credits:** 3
KHSS 175 - Prevention and Care of Injuries to the Physically Active **Credits:** 2
KHSS 221 - Human Structure and Function **Credits:** 3
MUSC 110 - Fundamentals of Theory **Credits:** 3
MUSC 115 - Theory I **Credits:** 3
MUSC 126 - Music Theater **Credits:** 0/1
THTR 116 - Fundamentals of Theatrical Design **Credits:** 3
THTR 122 - Costume Workshop **Credits:** 3
THTR 221 - Basic Stage Lighting **Credits:** 3
THTR 223 - Makeup for the Stage **Credits:** 3
THTR 321 - Stage Lighting Design **Credits:** 3
THTR 322 - Costume Design **Credits:** 3
THTR 486 - Practicum in Production **Credits:** 0-3 (1-3cr)

Free Electives: 31-32

Total Degree Requirements: 120

(1) Placement for technique level requirements will be determined by the Dance faculty based on student's previous training and/or current technique level (DANC 250, DANC 260, DANC 270, DANC 280, DANC 290, and the corresponding 486 studio level courses).

(2) Students are required to have 3cr of practicum for dance performance assignments and a 2-3 cr senior project assignment. Students may select to take additional practicum assignments within their advised electives.

Economics , BA

Liberal Studies: 47-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 121 - Calculus I for Natural and Social Sciences **Credits:** 4 (1)

Social Science:

ECON 121 - Principles of Macroeconomics **Credits:** 3

Liberal Studies Electives: 6

No courses with ECON prefix

College: 0-8

Foreign Language Intermediate Level (2)

Major: 27

Required Courses:

ECON 122 - Principles of Microeconomics **Credits:** 3

ECON 355 - Statistics for Economists **Credits:** 3 (3)

ECON 421 - Macroeconomic Analysis **Credits:** 3

ECON 422 - Microeconomic Analysis **Credits:** 3

Controlled Electives:

Five other ECON courses **Credits:** 15 (4, 5, 6)

Free Electives: 37-46

Total Degree Requirements: 120

- (1) MATH 115 or MATH 125 may be substituted for MATH 121.
- (2) Intermediate-level foreign language may be included in Liberal Studies electives.
- (3) MATH 214, MATH 216, MATH 217, or MATH 363 may be substituted for ECON 355.
- (4) No more than 6cr of internship credit may be applied toward major.
- (5) No more than two ECON controlled electives may be 200-level courses.
- (6) Neither ECON 101 nor ECON 143 counts as an ECON controlled elective.

General Sociology Track, Sociology, BA

The **General Track** attempts to broadly educate those students who may wish to pursue graduate training in sociology and make sociology a career and profession. Because of its flexibility, it is also appropriate for students who want to pursue double majors that would include such fields as psychology or criminology. The General Track gives students the broadest possible training in sociology. Students graduating with majors in general sociology often find employment in business, industry, and government.

Liberal Studies: 46-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 217 - Probability and Statistics **Credits:** 3 recommended

Social Science:

SOC 151 - Principles of Sociology **Credits:** 3

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits:** 3

Liberal Studies Electives: 6

No courses with SOC prefix

College: 0-8

Foreign Language Intermediate Level (1)

Major: 33

Required Courses:

SOC 151 - Principles of Sociology **Credits:** 3 (2)

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits:** 3 (2)

SOC 320 - Sociological Theory **Credits:** 3

SOC 460 - Social Research Methods I **Credits:** 3

SOC 461 - Social Research Methods II **Credits:** 3

One Course from the Following:

SOC 361 - Social Stratification **Credits:** 3

SOC 362 - Racial and Ethnic Minorities **Credits:** 3

SOC 363 - Sociology of Gender **Credits:** 3

Substantive Areas: 12

At least one different course from four of the following substantive areas:

Social Inequality and Social Change:

- SOC 269 - Sociology of Deviance **Credits: 3**
- SOC 337 - Society, Globalization, and Risk **Credits: 3**
- SOC 361 - Social Stratification **Credits: 3**
- SOC 362 - Racial and Ethnic Minorities **Credits: 3**
- SOC 363 - Sociology of Gender **Credits: 3**
- SOC 387 - Social and Cultural Change **Credits: 3**
- SOC 448 - Social Welfare Policy **Credits: 3**
- SOC 452 - Disability and Society **Credits: 3**
- SOC 458 - Political Sociology **Credits: 3**

Deviance and Social Problems:

- SOC 231 - Contemporary Social Problems **Credits: 3**
- SOC 269 - Sociology of Deviance **Credits: 3**
- SOC 333 - Delinquency and Youth **Credits: 3**
- SOC 335 - Alcohol and Drug Abuse **Credits: 3**
- SOC 427 - Social Perspectives on Intimate Partner Violence **Credits: 3**
- SOC 428 - Child Abuse **Credits: 3**
- SOC 452 - Disability and Society **Credits: 3**

Individual in Society:

- SOC 251 - Sociology of Human Sexuality **Credits: 3**
- SOC 269 - Sociology of Deviance **Credits: 3**
- SOC 345 - Interpersonal Dynamics **Credits: 3**
- SOC 357 - Sociology of Aging and the Life-course **Credits: 3**
- SOC 452 - Disability and Society **Credits: 3**

Social Organization and Institutions:

- SOC 286
- SOC 336 - Sociology of the Family **Credits: 3**
- SOC 340
- SOC 348 - Sociology of Work **Credits: 3**
- SOC 352 - Sociology of Religion **Credits: 3**
- SOC 421 - Sociology of Mass Media **Credits: 3**
- SOC 442 - Medical Sociology **Credits: 3**
- SOC 458 - Political Sociology **Credits: 3**

Comparative Sociology:

- SOC 233
- SOC 271
- SOC 272
- SOC 273
- SOC 286
- SOC 314 - Sociology of Native Americans **Credits: 3**
- SOC 337 - Society, Globalization, and Risk **Credits: 3**
- SOC 387 - Social and Cultural Change **Credits: 3**
- SOC 442 - Medical Sociology **Credits: 3**

Free Sociology Electives: 9

(3)

Free Electives: 31-41

Total Degree Requirements: 120

(1) Intermediate-level foreign language may be included in Liberal Studies electives.

(2) Credits counted in Liberal Studies, not in the major.

(3) Internship in Sociology (SOC 493) will not count as part of the required free sociology electives and must count as credits beyond the 33cr required for the major (out of free electives). The student must write a one-page justification explaining the selection of his/her 9cr of free sociology electives as it relates to the internship experience.

General Studies, BA

The bachelor of arts degree program in general studies is designed for adult learners with prior college experience but who lack a four-year degree. Under faculty advisement, the student will develop an individualized plan of study that does not duplicate any existing IUP major. The student's plan of study must be based on a specific theme that incorporates basic, applied, and professional course work within a theoretical framework. At the time of application for degree candidacy or transfer from another institution, a faculty member will be assigned to assist with the plan of study before acceptance.

Liberal Studies: 43

As outlined in the Liberal Studies Requirements with the following specifications:

College Concentration ("Theme"): 30

Complete all requirements for a recognized minor or a concentration approved by an advisor, plus additional courses offered within the same academic college (1). No less than 15 of these credits should be 300-level or above.

Special Interest Area ("Cognate Area"): 12

With approval of an advisor, the student will select additional courses that focus on a particular need, interest, or specialty that complements the college concentration.

Free Electives: 35

Total Degree Requirements: 120

A minimum of 42 credits of advanced course work is required for graduation in the program.

Individually planned themes may not duplicate any existing degree programs that are otherwise available at IUP, nor may they be used to circumvent specific requirements within an existing major.

(1) An advisor may provide pre-approval for course work outside of the college if it's closely related to the concentration. An example may be an HOSP course in an ECOBIT concentration or an IFMG course in a NSM college concentration.

Geography and Geographic Information Science (GIS), BA

The Department of Geography and Regional Planning offers two separate degree programs for the geographer and planner: bachelor of arts degree with a major in geography and geographic information science (GIS) and bachelor of science degree with a major in regional planning. Specific core requirements in Geography and Regional Planning offer a structured approach for majors. Appropriate specializations are available in both programs to prepare students for graduate work and to support different career options for majors. There are three specializations for the geography and GIS major (Environment/ Energy, Geospatial Information Science and Technology, Human Geography,) and two for the regional planning major (Environmental Planning, Community Planning and Development).

Department resources, which include the James Payne/Ruth Shirey Geographic Information Science Laboratory, the Robert Begg/Charles Weber Planning Design Laboratory/Studio, and the Dey Whit Watts Planning Studio offer access to spatial analysis and planning design equipment and applications. These well-equipped laboratories and studios house and leverage 50 workstations, large-format plotters, global positioning systems (GPS) units and a base station, small unmanned aerial systems (sUAS) aircraft, a weather station, and hydrologic and atmospheric monitoring devices. Geographic Information Systems (GIS), image processing, geovisualization, planning design, and computer-aided drafting (CAD) software includes the ArcGIS suite, the Adobe Creative Suite, AutoCAD, DroneDeploy UAS, ERDAS Imagine, Google SketchUp, MapInfo, and Trimble GPS PathFinder Office and TerraSync.

A strong internship program directed by department faculty offers numerous public, private, and nonprofit placements in industry, engineering, conservation, land management, and planning agencies at the local, state, and federal levels. Because of employment demand for students from department programs, approximately 80 percent of internship placements are paid positions.

Geography and Geographic Information Science (GIS)

Geography has several traditions of study. Three of the most significant are the study of relationships between humans and environment (human-environment interaction), the study of places (their characteristics and structure), and the study of spatial organization (the way people use and organize space on earth, and the distribution of natural phenomena on the earth's surface). All three traditions focus on understanding distributions of human and natural phenomena at global, regional and local scales, by building knowledge regarding the phenomena under investigation (for examples, cities, watersheds, business/industry location, habitats, cultural patterns, transportation, land use, resource management, the built environment, and energy production and use) and applying relevant methods and technologies (including geographic information systems (GIS), small unmanned aerial systems (sUAS), remote sensing, global positioning systems (GPS) and geovisualization) to analyze them. The Geography program is organized into three specializations to allow students to build knowledge and skills to pursue their interests and gain employment: Environment/Energy, Geospatial Information Science & Technology, and Human Geography.

Geography-Environment/Energy Specialization

The Environment/Energy Specialization prepares students for careers in environmental fields, energy industries, or graduate study. Students who elect this specialization acquire knowledge of the physical and human processes that shape the environment, strategies/techniques for analyzing the environment, regulatory and compliance regimes for energy industries at the federal and state levels, mitigation strategies for environmental problems, and conceptual and technical aspects of geospatial techniques implemented in environmental and energy resource analyses and applications. The knowledge and skills acquired in this specialization prepare students to analyze, manage, and understand land resources, water resources, energy resources and habitats using industry-standard methods and technology. Students mastering the environmental knowledge and spatial techniques in this specialization will be well prepared to obtain employment as environmental analysts/scientists, energy industry spatial analysts/ environmental compliance specialists, environmental managers, or environmental engineering specialists.

Geography Geospatial Information Science and Technology Specialization

The Geospatial Information Science and Technology Specialization provides preparation for employment as geographic information systems (GIS) analysts and specialists, remote-sensing specialists, geospatial techniques specialists (including GPS and sUAS), cartographers, and geospatial intelligence analysts. Students are exposed to core geospatial information science concepts (GISc) that underlie emerging and fast-changing geospatial hardware, software, and infrastructure in our society such as geographic information systems (GIS), global-positioning systems (GPS), remote sensing, small unmanned aerial systems (sUAS or drones), and mobile spatial technologies, as well as opportunities to apply these concepts. The curriculum for this specialization is referenced to competencies identified in the U.S. Department of Labor Geospatial Competency Model, as well as the University Consortium for Geographic Information Science (UCGIS) Geographic Information Science and Technology Body of Knowledge. Students completing the Geospatial Information Science and Technology Specialization will be well prepared to be employed in the rapidly-growing geospatial fields as GIS, remote sensing, and geointelligence professionals.

Geography Human Geography Specialization

The Human Geography Specialization provides a broad framework of ideas and theories regarding the spatial organization of human phenomena (for example cities, business/industry location, cultural patterns, transportation, economic patterns, land use, the built environment) in addition to coursework in industry standard location analysis techniques. The common thread through the course offerings in this specialization is the focus on understanding human-created geographic patterns on the earth's surface, and the methods which can be used to document and analyze these patterns. The knowledge base acquired in this specialization prepares students to understand and analyze urban development, business/industry location, cultural patterns, transportation accessibility, and economic development patterns. Students mastering the human geographic knowledge and analysis

techniques in this specialization will be well prepared to obtain employment as location analysts, economic development professionals, demographic analysts, research analysts, or to gain admission to graduate programs.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 217 - Probability and Statistics **Credits:** 3 (1)

Natural Science:

GEOS 101 - The Dynamic Earth **Credits:** 3

GEOS 102 - The Dynamic Earth Lab **Credits:** 1

and

GEOS 103 - Oceans and Atmospheres **Credits:** 3

GEOS 104 - Oceans and Atmospheres Lab **Credits:** 1

recommended

Liberal Studies Electives: 6

No courses with GEOG prefix

College: 0-8

Foreign Language Intermediate Level (2)

Major: 42

Required Courses:

GEOG 213 - Cartography and Map Design **Credits:** 3

GEOG 230 - Cultural Geography **Credits:** 3

GEOG 231 - Economic Geography **Credits:** 3

GEOG 316 - Introduction to Geographic Information Systems **Credits:** 3

GEOG 341 - Climatology **Credits:** 3

GEOG 342 - Physiography **Credits:** 3

GEOG 411 - History of Geography **Credits:** 3

RGPL 350 - Introduction to Community Planning **Credits:** 3

Controlled Electives:

One course from GEOG 251-GEOG 257 **Credits:** 3

Select one of the following Specializations:

Environment/Energy Specialization:

Four courses from the following:

GEOG 222 - Geography of National Parks **Credits: 3**
GEOG 343 - Fresh Water Resources **Credits: 3**
GEOG 345 - Biogeography for Environmental Managers **Credits: 3**
GEOG 415 - Introduction to Remote Sensing **Credits: 3**
GEOG 425 - Global Positioning Systems (GPS) Concepts and Techniques **Credits: 3**
GEOG 435 - Geography of Energy **Credits: 3**
GEOG 440 - Conservation: Environmental Analysis **Credits: 3**
GEOG 444 - Energy Development and Compliance **Credits: 3**
GEOG 455 - Advanced Remote Sensing **Credits: 3**
RGPL 426 - Environmental Land Use Planning **Credits: 3**

Geospatial Information and Technology Specialization:

Four courses from the following:

GEOG 415 - Introduction to Remote Sensing **Credits: 3**
GEOG 421 - Enterprise GIS Management **Credits: 3**
GEOG 424 - Technical Issues in Geographic Information Systems **Credits: 3**
GEOG 425 - Global Positioning Systems (GPS) Concepts and Techniques **Credits: 3**
GEOG 455 - Advanced Remote Sensing **Credits: 3**
GEOG 460 - Foundations of Unmanned Aerial Systems Science and Applications **Credits: 3**
GEOG 475 - Spatial Analysis Techniques **Credits: 3**

Human Geography Specialization:

Four courses from the following:

GEOG 232 - Urban Landscapes **Credits: 3**
GEOG 261 - Geography of Wine **Credits: 3**
GEOG 331 - Population Geography **Credits: 3**
GEOG 333 - Trade and Transportation **Credits: 3**
GEOG 334 - Political Geography **Credits: 3**
GEOG 336 - Social Geography **Credits: 3**
GEOG 337 - Historical Geography **Credits: 3**
GEOG 404 - Transportation Planning **Credits: 3**

Free Electives: 23-32

Strongly recommended for all majors:

GEOG 493 - Internship **Credits: 3-12**

Recommended for Environment/Energy Specialization:

BIOL 210 - Plant Biology **Credits: 3**
BIOL 362 - Ecology **Credits: 3**

GEOG 462 - Planning Policy, Implementation, and Administration **Credits: 3**
RGPL 462 - Planning Policy, Implementation, and Administration **Credits: 3**

GEOS 201 - Foundations of Geology **Credits: 4**
GEOS 202 - Quantitative Methods in the Geoscience **Credits: 2**

Recommended for Geospatial Information Technology Specialization:

RGPL 453 - Planning Design Studio I **Credits: 3**
RGPL 454 - Planning Design Studio II **Credits: 3**

Total Degree Requirements: 120

- (1) An alternative to MATH 217 is 6cr of MATH courses. Only one must be a Liberal Studies MATH course.
- (2) Intermediate-level foreign language may be included in Liberal Studies electives.

History Track, Art, BA

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

Liberal Studies Electives: 6

No courses with ARHI prefix

Major:

Foundation Required: 18

ARHI 205 - Ancient to Medieval Art **Credits: 3**
ARHI 207 - Renaissance through Modern Art **Credits: 3**
ARHI 224 - Introduction to Asian Art **Credits: 3**
ARHI 413 - Senior Seminar **Credits: 3**
ART 112 - Fundamentals of Drawing **Credits: 3**
ART 114 - Color and Two-Dimensional Design **Credits: 3**

Controlled Electives: 27

Choose nine courses from the following:

Up to 6cr (two courses) of Art Studio, prefix ART

ARHI 100 - Arts of the 20th Century **Credits: 3**
ARHI 222
ARHI 300
ARHI 321 - History of World Ceramics **Credits: 3**
ARHI 407 - Medieval Art **Credits: 3**
ARHI 408 - Italian Renaissance Art **Credits: 3**
ARHI 409 - Baroque and Rococo Art **Credits: 3**
ARHI 410 - 19th-Century European Painting **Credits: 3**
ARHI 411 - 20th-Century European Art **Credits: 3**
ARHI 412 - Classical Art **Credits: 3**
ARHI 416
ARHI 417 - Byzantine Art **Credits: 3**
ARHI 423 - Art of Japan **Credits: 3**
ARHI 424 - Art of India and Southeast Asia **Credits: 3**

ARHI 425 - Arts of China **Credits:** 3
ARHI 493 - Internship **Credits:** 3-12

Foreign Language Required: 0-12

Foreign Language Intermediate Level (1)

Free Electives: 16-29

Total Degree Requirements: 120

(1) Intermediate-level foreign language may be included in Liberal Studies electives.

History, BA

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities-History:

Fulfilled by required courses in major

Mathematics: 3

Liberal Studies Electives: 9

No courses with HIST prefix

College: 0-6

Foreign Language Intermediate Level (1)

Major: 41

Skills Courses: 8

HIST 295 - Introduction to Historical Studies **Credits:** 2

HIST 395 - Introduction to Historical Methods **Credits:** 3

Choose any three 1cr skills courses from:

HIST 215 - The Researcher as Detective **Credits:** 1

HIST 217 - Different Ways of Looking at the Past **Credits:** 1

HIST 218 - Right in Your Own Backyard: How to Do Local History **Credits:** 1

HIST 219 - Historians and the Public: Preserving and Presenting the Past **Credits:** 1

HIST 220 - Visual Sources in History **Credits:** 3

HIST 221 - The Historian's Craft **Credits:** 1

Foundation Courses: 9

Choose 3 from:

- HIST 201 - Western Civilization before 1600 **Credits: 3**
- HIST 202 - Western Civilization since 1600 **Credits: 3**
- HIST 204 - United States History to 1877 **Credits: 3**
- HIST 205 - United States History since 1877 **Credits: 3**
- HIST 206 - The History of East Asia **Credits: 3**
- HIST 207 - The History of the Middle East **Credits: 3**

Controlled Electives:

Three courses must fit into one theme; an additional course into a second theme. Note that many courses fit into two themes. At least ONE must be a Non-western HIST course: Latin America, Africa, Asia, Middle East or Russia, 300-400 level.

Theme: Society, Culture, the Environment

- HIST 302 - History of Ancient Rome **Credits: 3**
- HIST 304 - Medieval Europe II, 1000-1300 **Credits: 3**
- HIST 305 - Renaissance and Reformation **Credits: 3**
- HIST 306 - Early Modern Europe **Credits: 3**
- HIST 312 - Europe, 1914-1945: The Age of Dictators and Imperiled Democracies **Credits: 3**
- HIST 313 - Europe Since 1945: Division, Revolution, and Unity **Credits: 3**
- HIST 323 - France, 1815 to the Present **Credits: 3**
- HIST 326 - History of Russia **Credits: 3**
- HIST 338 - The History of Iran **Credits: 3**
- HIST 343 - Civil War and Reconstruction **Credits: 3**
- HIST 346 - Recent United States History **Credits: 3**
- HIST 350 - History of Latin America: Colonial Period, 1450-1820 **Credits: 3**
- HIST 360
- HIST 363 - Thought and Culture in Early America **Credits: 3**
- HIST 365 - History of Black America since Emancipation **Credits: 3**
- HIST 369 - Women in America **Credits: 3**
- HIST 374 - History of Organized Crime **Credits: 3**
- HIST 385 - People in Nature: An Introduction to Environmental History **Credits: 3**
- HIST 433 - China 1300-1800: The Late Imperial Age **Credits: 3**
- HIST 436 - Japan 1500-1850: Early Modern Japan **Credits: 3**
- HIST 475 - History of American Constitutionalism **Credits: 3**

Theme: Transnational, Global and Comparative

- HIST 307 - History of Europe: 1815-1914 **Credits: 3**
- HIST 311 - Rise and Fall of Hitler's Empire **Credits: 3**
- HIST 313 - Europe Since 1945: Division, Revolution, and Unity **Credits: 3**
- HIST 322 - French Revolution and Napoleon **Credits: 3**
- HIST 327 - Soviet Union and Contemporary Russia **Credits: 3**
- HIST 331 - Modern Middle East **Credits: 3**
- HIST 332 - History of Early China **Credits: 3**
- HIST 339 - Jihad and the Origins of Islamist Movements in the Middle East **Credits: 3**
- HIST 342 - The Early Republic **Credits: 3**
- HIST 348 - Top Secret America: The Rise and Reach of the National Security State **Credits: 3**
- HIST 351 - History of Latin America: National Period, 1820-Present **Credits: 3**
- HIST 362 - History of American Diplomacy, 1900-present **Credits: 3**
- HIST 385 - People in Nature: An Introduction to Environmental History **Credits: 3**
- HIST 391 - Film as History **Credits: 3**
- HIST 434 - Modern China 1800-present **Credits: 3**
- HIST 437 - Modern Japan 1850-Present **Credits: 3**

Theme: Government, Nations, and Empires

- HIST 302 - History of Ancient Rome **Credits: 3**
- HIST 303 - Medieval Europe I, 400-1000 **Credits: 3**
- HIST 304 - Medieval Europe II, 1000-1300 **Credits: 3**
- HIST 305 - Renaissance and Reformation **Credits: 3**
- HIST 307 - History of Europe: 1815-1914 **Credits: 3**
- HIST 311 - Rise and Fall of Hitler's Empire **Credits: 3**
- HIST 312 - Europe, 1914-1945: The Age of Dictators and Imperiled Democracies **Credits: 3**
- HIST 320 - History of England to 1688 **Credits: 3**
- HIST 322 - French Revolution and Napoleon **Credits: 3**
- HIST 323 - France, 1815 to the Present **Credits: 3**
- HIST 326 - History of Russia **Credits: 3**
- HIST 327 - Soviet Union and Contemporary Russia **Credits: 3**
- HIST 331 - Modern Middle East **Credits: 3**
- HIST 332 - History of Early China **Credits: 3**
- HIST 338 - The History of Iran **Credits: 3**
- HIST 341 - American Revolution **Credits: 3**
- HIST 342 - The Early Republic **Credits: 3**
- HIST 343 - Civil War and Reconstruction **Credits: 3**
- HIST 346 - Recent United States History **Credits: 3**
- HIST 348 - Top Secret America: The Rise and Reach of the National Security State **Credits: 3**
- HIST 350 - History of Latin America: Colonial Period, 1450-1820 **Credits: 3**
- HIST 351 - History of Latin America: National Period, 1820-Present **Credits: 3**
- HIST 360
- HIST 365 - History of Black America since Emancipation **Credits: 3**
- HIST 369 - Women in America **Credits: 3**
- HIST 374 - History of Organized Crime **Credits: 3**
- HIST 391 - Film as History **Credits: 3**
- HIST 434 - Modern China 1800-present **Credits: 3**
- HIST 437 - Modern Japan 1850-Present **Credits: 3**
- HIST 475 - History of American Constitutionalism **Credits: 3**

Non-Western HIST Course

- HIST 326 - History of Russia **Credits: 3**
- HIST 327 - Soviet Union and Contemporary Russia **Credits: 3**
- HIST 331 - Modern Middle East **Credits: 3**
- HIST 332 - History of Early China **Credits: 3**
- HIST 338 - The History of Iran **Credits: 3**
- HIST 339 - Jihad and the Origins of Islamist Movements in the Middle East **Credits: 3**
- HIST 350 - History of Latin America: Colonial Period, 1450-1820 **Credits: 3**
- HIST 433 - China 1300-1800: The Late Imperial Age **Credits: 3**
- HIST 434 - Modern China 1800-present **Credits: 3**
- HIST 436 - Japan 1500-1850: Early Modern Japan **Credits: 3**
- HIST 437 - Modern Japan 1850-Present **Credits: 3**

Other Requirements

Students must complete an honors thesis, double major, minor, or certificate.

Free Electives: 24-33

Total Degree Requirements: 120

(1) Intermediate-level foreign language may be included in Liberal Studies elective.

*During sophomore year each student, in consultation with their advisor, will select a specialization.

Public History Specialization: 12

Required: 9

HIST 420 - Introduction to Public History **Credits: 3**

HIST 499 - Topics in Public History **Credits: 3**

HIST 493 - Internship **Credits: 3-12**

or

appropriate substitution

Controlled Electives: 3

Choose one:

HIST 421 - Archival Studies **Credits: 3**

HIST 422 - History Museums and Historic Sites: Theory and Practice **Credits: 3**

HIST 423 - Oral History Practice **Credits: 3**

Public Service Specialization: 12

Required: 6

Choose one:

HIST 495 - Topics in United States History **Credits: 3**

HIST 496 - Topics in European History **Credits: 3**

HIST 497 - Topics in Non-Western History **Credits: 3**

HIST 498 - Topics in Comparative History **Credits: 3**

Choose one:

HIST 493 - Internship **Credits: 3-12**

or

appropriate substitution

Controlled Electives: 6

Choose two:

COMM 315 - Persuasive Media Writing **Credits: 3**

COMM 335 - Communications Consulting and Project Management **Credits: 3**

COMM 354 - Media Law and Policy **Credits: 3**

ECON 223 - Economics of Crime **Credits: 3**

ECON 335 - Public Finance **Credits: 3**

ECON 361 - Environmental Economics **Credits: 3**

ELR 314 - Health Policy and Law **Credits: 3**

ELR 480 - Introduction to Negotiations and Conflict Resolution **Credits: 3**

ENGL 310 - Public Speaking **Credits: 3**
ENGL 321 - Persuasive Speech and Writing **Credits: 3**

GEOG 231 - Economic Geography **Credits: 3**

GEOS 119 - Geology of Energy Resources **Credits: 3**
GEOS 151 - The Age of Dinosaurs **Credits: 3**
GEOS 156 - Geology of Natural Disasters **Credits: 3**

JRNL 126 - Introduction to Public Relations **Credits: 3**
JRNL 301 - Presentation Making **Credits: 3**

NURS 314 - Health Policy and Law **Credits: 3**

PLSC 351 - Legislative Process **Credits: 3**
PLSC 354 - Metropolitan Problems **Credits: 3**
PLSC 358 - Judicial Process **Credits: 3**

SOC 231 - Contemporary Social Problems **Credits: 3**
SOC 337 - Society, Globalization, and Risk **Credits: 3**
SOC 345 - Interpersonal Dynamics **Credits: 3**

WGS 200 - Introduction to Women's and Gender Studies **Credits: 3**

other appropriate substitutions with approval of advisor

Private Sector Specialization: 12

Required: 6

Choose one:

HIST 495 - Topics in United States History **Credits: 3**
HIST 496 - Topics in European History **Credits: 3**
HIST 497 - Topics in Non-Western History **Credits: 3**
HIST 498 - Topics in Comparative History **Credits: 3**

Choose one:

HIST 493 - Internship **Credits: 3-12**

or

appropriate substitution

Controlled Electives: 6

Choose two:

BLAW 235 - Legal Environment of Business **Credits: 3**

COMM 315 - Persuasive Media Writing **Credits: 3**
COMM 335 - Communications Consulting and Project Management **Credits: 3**

ECON 330 - Labor Economics **Credits: 3**
ECON 331 - Industrial Organization **Credits: 3**
ECON 345 - International Trade **Credits: 3**

ENGL 310 - Public Speaking **Credits: 3**

ENGL 321 - Persuasive Speech and Writing **Credits: 3**

HOSP 212 - Club Operations Management **Credits: 3**

HOSP 235 - Tourism Management **Credits: 3**

JRNL 105 - Journalism and the Mass Media **Credits: 3**

JRNL 126 - Introduction to Public Relations **Credits: 3**

JRNL 301 - Presentation Making **Credits: 3**

MGMT 105 - Introduction to Business **Credits: 3**

MGMT 275 - Introduction to Entrepreneurship **Credits: 3**

SOC 421 - Sociology of Mass Media **Credits: 3**

WGS 200 - Introduction to Women's and Gender Studies **Credits: 3**

other appropriate substitutions with approval of advisor

Pre-Law Specialization: 12

Required: 3

Choose one:

HIST 495 - Topics in United States History **Credits: 3**

HIST 496 - Topics in European History **Credits: 3**

HIST 497 - Topics in Non-Western History **Credits: 3**

HIST 498 - Topics in Comparative History **Credits: 3**

Controlled Electives: 9

Choose three from:

HIST 320 - History of England to 1688 **Credits: 3**

HIST 341 - American Revolution **Credits: 3**

HIST 342 - The Early Republic **Credits: 3**

HIST 346 - Recent United States History **Credits: 3**

HIST 475 - History of American Constitutionalism **Credits: 3**

Other Requirements:

Take the Pre-law Interdisciplinary Minor.

Individual Specialization: 12

Required: 3

Choose one:

HIST 495 - Topics in United States History **Credits: 3**

HIST 496 - Topics in European History **Credits: 3**

HIST 497 - Topics in Non-Western History **Credits: 3**

HIST 498 - Topics in Comparative History **Credits: 3**

Controlled Electives: 9

9 credits from upper division HIST courses

Other Requirements:

Student must complete an honors thesis, double major, minor, or certificate.

Homeland Security Track, Political Science, BA

Homeland security is the intersection of evolving threats, to include terrorism and other risks to national security, and natural and man-made hazards with traditional governmental and civic responsibilities. This multi-disciplinary track is built upon a political science core (required courses), with an emphasis on administration and policy (controlled electives). Students will choose between specializing in Homeland Defense or Emergency Management. The Homeland Defense specialization will focus on identifying risks to the homeland's security and essential infrastructure, and developing policy and strategy that mitigate, if not obviate, these risks. The Emergency Management track will focus on the twin facets of program administration and emergency management, sometimes called disaster or crisis management. The Political Science/Homeland Security major track emphasizes critical and creative thinking, information literacy, oral and written communications, interpersonal relations and teamwork. The knowledge and skills students will gain will prepare them to work in private businesses; emergency and safety management; private security; airports and border patrol; local, state, and federal law enforcement; and military service.

Liberal Studies: 46-47

As outlined in Liberal Studies Requirements section with the following specifications

Mathematics: 3

Social Science:

PLSC 111 - American Government **Credits: 3**

Liberal Studies Electives: 6

No courses with PLSC prefix

College: 0-6

Foreign Language Intermediate Level (1)

Major:33

Required Courses:

PLSC 101 - World Politics **Credits: 3 (2)**

PLSC 111 - American Government **Credits: 3 (3)**

PLSC 260 - Contemporary Political Ideas **Credits: 3**

PLSC 270 - Fundamentals of Homeland Security **Credits: 3**

PLSC 300 - Research Methods in Political Science **Credits: 3**

Controlled Electives: 9

Students must take three of the following controlled electives in the area of public policy/administration:

- PLSC 250 - Public Policy **Credits: 3**
- PLSC 355 - Intergovernmental Relations **Credits: 3**
- PLSC 370 - The Practice of Public Administration **Credits: 3**
- PLSC 372 - Constitutional Issues in Homeland Security **Credits: 3**
- PLSC 375 - Crisis Management and Decision Making **Credits: 3**

Specializations:

Students must take four courses in their specialization. At least two courses must have a prefix other than PLSC.

Homeland Defense: 12

- BCOM 342 - Intercultural Business Communication **Credits: 3**
- COMM 101 - Introduction to Communications, Media, and Culture **Credits: 3**
- COSC 356 - Network Security **Credits: 3**
- COSC 429 - Digital Forensics **Credits: 3**
- COSC 454 - Information Assurance Administration **Credits: 3**
- CRIM 205 - Policing and the Community **Credits: 3**
- CRIM 255 - Law, Social Control, and Society **Credits: 3**
- CRIM 321 - Cybersecurity and Loss Prevention **Credits: 3**
- CRIM 323 - Cybersecurity and the Law **Credits: 3**
- CRIM 344 - Terrorism **Credits: 3**
- or
- PLSC 344 - Terrorism **Credits: 3**
- GEOG 316 - Introduction to Geographic Information Systems **Credits: 3**
- or
- RGPL 316 - Introduction to Geographic Information Systems **Credits: 3**
- HIST 339 - Jihad and the Origins of Islamist Movements in the Middle East **Credits: 3**
- or
- PLSC 339 - Jihad and the Origins of Islamist Movements in the Middle East **Credits: 3**
- HIST 348 - Top Secret America: The Rise and Reach of the National Security State **Credits: 3**
- or
- PLSC 348 - Top Secret America: The Rise and Reach of the National Security State **Credits: 3**
- PLSC 350 - The Presidency **Credits: 3**
- PLSC 388 - Dimensions of National Security **Credits: 3 (4)**
- PLSC 465 - Intelligence Process and Policy **Credits: 3**
- SOC 337 - Society, Globalization, and Risk **Credits: 3**

Emergency Management: 12

- BIOL 107 - Introduction to Forensic Biology **Credits: 3**
- BIOL 119 - Emerging Diseases **Credits: 3**
- BIOL 221 - Environmental Health and Protection **Credits: 4**
- BCOM 342 - Intercultural Business Communication **Credits: 3**
- CHEM 105 - The Forensic Chemistry of CSI **Credits: 3**
- COMM 101 - Introduction to Communications, Media, and Culture **Credits: 3**
- CRIM 205 - Policing and the Community **Credits: 3**
- CRIM 255 - Law, Social Control, and Society **Credits: 3**
- CRIM 374 - Environmental Crime and Justice **Credits: 3**
- CRIM 401 - Contemporary Issues in Criminology **Credits: 3**
- GEOG 101 - Environment and Society **Credits: 3**
- GEOG/RGPL Urban Landscapes **Credits: 3**
- GEOG 316 - Introduction to Geographic Information Systems **Credits: 3**
- or
- RGPL 316 - Introduction to Geographic Information Systems **Credits: 3**

GEOG 341 - Climatology **Credits: 3**

or

RGPL 341 - Climatology **Credits: 3**

GEOG 343 - Fresh Water Resources **Credits: 3**

or

RGPL 343 - Fresh Water Resources **Credits: 3**

NMDT 430 - Radiation Biology and Radiation Protection **Credits: 2**

NURS 101 - Disaster Awareness **Credits: 1**

PHYS 101 - Energy and Our Environment **Credits: 3**

SOC 337 - Society, Globalization, and Risk **Credits: 3**

SAFE 220 - Hazardous Materials and Emergency Management **Credits: 3**

Free Electives: 34- 41

Total Degree Requirements:120

- (1) Intermediate-level foreign language may be included in Liberal Studies electives.
- (2) PLSC 101 satisfies the global and multicultural awareness requirement.
- (3) Credits for PLSC 111 are counted in the Liberal Studies social science requirements.
- (4) PLSC 280 and/or PLSC 285 is recommended as a prerequisite for PLSC 388.

Honors Program in Psychology, Psychology, BA

Liberal Studies: 43-44

As outlined in Liberal Studies Requirements section with the following specifications:

Mathematics:

MATH 217 - Probability and Statistics **Credits: 3**

Natural Science:

BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**
recommended

BIOL 106 - Human Genetics and Health **Credits: 3**
recommended

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Elective: 3

No course with PSYC prefix (1)

Major: 42

Required Courses:

- PSYC 100 - The Psychology Major: Curriculum and Careers **Credits:** 1
PSYC 102 - Identity and Interactions in a Diverse World **Credits:** 2
PSYC 200 - Psychological Research I **Credits:** 3
PSYC 215 - Developmental Psychology **Credits:** 3
PSYC 225 - Abnormal Psychology **Credits:** 3
PSYC 235 - Social Psychology **Credits:** 3
PSYC 245 - Learning and Cognition **Credits:** 3
PSYC 255 - Biopsychology **Credits:** 3
- PSYC 300 - Psychological Research II: Quantitative Research Methods **Credits:** 3
or
PSYC 301 - Psychological Research II: Qualitative Research Methods **Credits:** 3
- PSYC 480 - Honors Seminar in Psychology **Credits:** 3 (2) (**Taken twice for 6 total credits, see footnote**)
PSYC 483 - Honors Thesis **Credits:** 1-6 (3) (**Taken twice for 6 total credits, see footnote**)

Controlled Electives:

Two courses with different course numbers from the following:

- PSYC 415 - Advanced Topics in Developmental Psychology **Credits:** 3
PSYC 435 - Advanced Topics in Social Psychology **Credits:** 3
PSYC 445 - Advanced Topics in Learning and Cognition **Credits:** 3
PSYC 450 - Counseling Skills **Credits:** 3
PSYC 455 - Advanced Topics in Biological Psychology **Credits:** 3

Other Requirements: 18-24

- Foreign Language Intermediate Level **Credits:** 0-6
Minor/Concentration (4) **Credits:** 18

Free Electives: 17

Total Degree Requirements: 120

- (1) Intermediate-level foreign language may be included in Liberal Studies electives.
- (2) Students will enroll in PSYC 480 for 3cr in each of two semesters.
- (3) Students will enroll in PSYC 483 for 3cr in each of two semesters.
- (4) Concentration plan developed in consultation with advisor.

Human Services Track, Sociology, BA

The **Human Services Track** in sociology seeks to help students understand the causes of many of the problems that plague modern societies, such as poverty, racial discrimination, substance abuse, and domestic violence. It is designed to provide students with the knowledge and skills necessary to

become practitioners in various human services areas (e.g., juvenile delinquency, medical sociology, gerontology, and interpersonal dynamics and family sociology).

Liberal Studies: 46-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 217 - Probability and Statistics **Credits:** 3 recommended

Social Science:

Required

SOC 151 - Principles of Sociology **Credits:** 3

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits:** 3

Recommended

ANTH 110 - Contemporary Anthropology **Credits:** 3

PSYC 101 - General Psychology **Credits:** 3

Liberal Studies Electives: 6

No courses with SOC prefix

College: 0-8

Foreign Language Intermediate Level (1)

Major: 42

Required Courses:

SOC 151 - Principles of Sociology **Credits:** 3 (2)

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits:** 3 (2)

SOC 320 - Sociological Theory **Credits:** 3

SOC 391 - Foundations of Sociological Practice **Credits:** 3

SOC 392 - Clinical Sociological Practice **Credits:** 3

SOC 460 - Social Research Methods I **Credits:** 3

SOC 461 - Social Research Methods II **Credits:** 3

SOC 493 - Internship in Sociology **Credits:** 3-12 (3)

Controlled Electives: 15

One substantive area (4, 5)

Medical Sociology:

SOC 442 - Medical Sociology **Credits: 3**

Four Courses from the Following:

ANTH 222 - Biological Anthropology **Credits: 3**

ANTH 444 - Medical Anthropology **Credits: 3**

BIOL 240 - Human Physiology **Credits: 4**

or

BIOL 155 - Human Physiology and Anatomy **Credits: 4**

ECON 335 - Public Finance **Credits: 3**

FDNT 212 - Nutrition **Credits: 3**

PSYC 225 - Abnormal Psychology **Credits: 3**

PSYC 378 - Psychology of Death and Dying **Credits: 3**

SOC 231 - Contemporary Social Problems **Credits: 3**

SOC 336 - Sociology of the Family **Credits: 3**

SOC 357 - Sociology of Aging and the Life-course **Credits: 3**

SOC 387 - Social and Cultural Change **Credits: 3**

SOC 448 - Social Welfare Policy **Credits: 3**

SOC 452 - Disability and Society **Credits: 3**

Gerontology:

SOC 357 - Sociology of Aging and the Life-course **Credits: 3**

Four Courses from the Following:

ANTH 444 - Medical Anthropology **Credits: 3**

ECON 335 - Public Finance **Credits: 3**

PSYC 312 - Adult Development and Aging **Credits: 3**

PSYC 378 - Psychology of Death and Dying **Credits: 3**

SOC 231 - Contemporary Social Problems **Credits: 3**

SOC 251 - Sociology of Human Sexuality **Credits: 3**

SOC 336 - Sociology of the Family **Credits: 3**

SOC 352 - Sociology of Religion **Credits: 3**

SOC 387 - Social and Cultural Change **Credits: 3**

SOC 442 - Medical Sociology **Credits: 3**

SOC 448 - Social Welfare Policy **Credits: 3**

Juvenile Delinquency:

SOC 333 - Delinquency and Youth **Credits: 3**

Four Courses from the Following:

CRIM 102 - Survey of Criminology **Credits: 3**

CRIM 225 - Survey of Corrections **Credits: 3**

CRIM 235 - Survey of Juvenile Justice and Juvenile Law **Credits: 3**

CRIM 394 - Crime and Delinquency Prevention **Credits: 3**

GEOG 230 - Cultural Geography **Credits: 3**

GEOG 231 - Economic Geography **Credits: 3**

HIST 374 - History of Organized Crime **Credits: 3**

SOC 231 - Contemporary Social Problems **Credits: 3**

SOC 269 - Sociology of Deviance **Credits: 3**

SOC 335 - Alcohol and Drug Abuse **Credits: 3**
SOC 336 - Sociology of the Family **Credits: 3**
SOC 345 - Interpersonal Dynamics **Credits: 3**
SOC 361 - Social Stratification **Credits: 3**
SOC 362 - Racial and Ethnic Minorities **Credits: 3**
SOC 387 - Social and Cultural Change **Credits: 3**
SOC 428 - Child Abuse **Credits: 3**
SOC 448 - Social Welfare Policy **Credits: 3**

Interpersonal and Family Sociology:

SOC 336 - Sociology of the Family **Credits: 3**
or
SOC 345 - Interpersonal Dynamics **Credits: 3**

Four Courses from the Following:

CDFR 218 - Child Development **Credits: 3**
CDFR 224 - Marriage and Family Relations **Credits: 3**
PSYC 311 - Child Psychology **Credits: 3**
PSYC 225 - Abnormal Psychology **Credits: 3**
PSYC 235 - Social Psychology **Credits: 3**
SOC 251 - Sociology of Human Sexuality **Credits: 3**
SOC 269 - Sociology of Deviance **Credits: 3**
SOC 333 - Delinquency and Youth **Credits: 3**
SOC 335 - Alcohol and Drug Abuse **Credits: 3**
SOC 336 - Sociology of the Family **Credits: 3**
SOC 345 - Interpersonal Dynamics **Credits: 3**
SOC 361 - Social Stratification **Credits: 3**
SOC 362 - Racial and Ethnic Minorities **Credits: 3**
SOC 363 - Sociology of Gender **Credits: 3**
SOC 387 - Social and Cultural Change **Credits: 3**
SOC 427 - Social Perspectives on Intimate Partner Violence **Credits: 3**
SOC 428 - Child Abuse **Credits: 3**
SOC 448 - Social Welfare Policy **Credits: 3**
SOC 452 - Disability and Society **Credits: 3**

Labor and Industry:

SOC 340
or
SOC 348 - Sociology of Work **Credits: 3**

Four Courses from the Following:

ECON 330 - Labor Economics **Credits: 3**
ELR 480 - Introduction to Negotiations and Conflict Resolution **Credits: 3**
PSYC 390 - Industrial-Organizational Psychology **Credits: 3**
RGPL 350 - Introduction to Community Planning **Credits: 3**
SOC 231 - Contemporary Social Problems **Credits: 3**
SOC 340
SOC 348 - Sociology of Work **Credits: 3**
SOC 361 - Social Stratification **Credits: 3**
SOC 387 - Social and Cultural Change **Credits: 3**
SOC 448 - Social Welfare Policy **Credits: 3**
SOC 458 - Political Sociology **Credits: 3**

Community Development:

SOC 231 - Contemporary Social Problems **Credits: 3**

or

SOC 448 - Social Welfare Policy **Credits: 3**

Four Courses from the Following:

ANTH 271 - Cultural Area Studies: Africa **Credits: 3**

or

SOC 271

ANTH 272 - Culture Area: China **Credits: 3**

or

SOC 272

ANTH 314 - Contemporary Native American Cultures **Credits: 3**

or

SOC 314 - Sociology of Native Americans **Credits: 3**

FDNT 402 - Community Nutrition **Credits: 3**

GEOG 331 - Population Geography **Credits: 3**

GEOG 232 - Urban Landscapes **Credits: 3**

PLSC 251 - State and Local Political Systems **Credits: 3**

RGPL 350 - Introduction to Community Planning **Credits: 3**

SOC 231 - Contemporary Social Problems **Credits: 3**

SOC 269 - Sociology of Deviance **Credits: 3**

SOC 333 - Delinquency and Youth **Credits: 3**

SOC 336 - Sociology of the Family **Credits: 3**

SOC 363 - Sociology of Gender **Credits: 3**

SOC 387 - Social and Cultural Change **Credits: 3**

SOC 448 - Social Welfare Policy **Credits: 3**

Free Electives: 22-32

Total Degree Requirements: 120

- (1) Intermediate-level foreign language may be included in Liberal Studies electives.
- (2) Credits counted in Liberal Studies, not in the major.
- (3) SOC 391 and SOC 392 must be taken before SOC 493. Generally, SOC 493 is taken in the summer before or after the senior year.
- (4) Students may create their own substantive area with the approval of the department Chair.
- (5) At least four courses in any substantive area must be SOC/SOWK courses.

International Studies/Political Science, BA

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

Social Science:

PLSC 111 - American Government **Credits: 3**

Liberal Studies Electives: 6

No courses with PLSC prefix

College: 0-6

Foreign Language Intermediate Level (1)

Major: 33

Required Courses:

PLSC 101 - World Politics **Credits: 3**
PLSC 111 - American Government **Credits: 3 (2)**
PLSC 260 - Contemporary Political Ideas **Credits: 3**
PLSC 282 - International Relations **Credits: 3**
PLSC 300 - Research Methods in Political Science **Credits: 3**

Specializations:

International Political Economy: 21

Required specialization course:

PLSC 422 - International Law and Organizations **Credits: 3**

Six Courses from the Following:

ACCT 471
BCOM 342 - Intercultural Business Communication **Credits: 3**
COMM 320
ECON 121 - Principles of Macroeconomics **Credits: 3**
ECON 325 - Monetary Economics I **Credits: 3**
ECON 339 - Economic Development I **Credits: 3**
ECON 345 - International Trade **Credits: 3**
ECON 346 - International Finance **Credits: 3**
ECON 350
FSMR 357 - Global Issues in Textiles and Apparel **Credits: 3**
GEOG 231 - Economic Geography **Credits: 3**
GEOG 333 - Trade and Transportation **Credits: 3**
MGMT 350 - International Business **Credits: 3**
MGMT 451 - International Management **Credits: 3**
MGMT 454 - International Competitiveness **Credits: 3**
MGMT 459 - Seminar in International Management **Credits: 3**
MKTG 350 - International Business **Credits: 3**
MKTG 430 - International Marketing **Credits: 3**
PLSC 361 - Modern Political Thought **Credits: 3**

PLSC 383 - Political Systems: Asia **Credits: 3**
SOC 337 - Society, Globalization, and Risk **Credits: 3**

International Security Studies: 21

Required specialization course:

PLSC 283 - American Foreign Policy **Credits: 3**
or
PLSC 388 - Dimensions of National Security **Credits: 3**
or
PLSC 465 - Intelligence Process and Policy **Credits: 3**

Six Courses from the Following:

*(if not taken as the required specialization course)

BIOL 117 - Understanding HIV Biology and AIDS **Credits: 3**
BIOL 119 - Emerging Diseases **Credits: 3**
CRIM 344 - Terrorism **Credits: 3**
ECON 361 - Environmental Economics **Credits: 3**
GEOG 230 - Cultural Geography **Credits: 3**
GEOG 331 - Population Geography **Credits: 3**
GEOG 334 - Political Geography **Credits: 3**
GEOG 335
GEOG 341 - Climatology **Credits: 3**
HIST 251 - United States Military History **Credits: 3**
HIST 308
HIST 361
HIST 362 - History of American Diplomacy, 1900-present **Credits: 3**
JRNL 375 - World News Coverage **Credits: 3**
PLSC 283 - American Foreign Policy **Credits: 3 ***
PLSC 422 - International Law and Organizations **Credits: 3**
PLSC 388 - Dimensions of National Security **Credits: 3 ***
PLSC 465 - Intelligence Process and Policy **Credits: 3 ***
RLST 110 - World Religions **Credits: 3**
RLST 200

International Political Systems: 21

Required specialization course:

PLSC 280 - Comparative Government I: Western Political Systems **Credits: 3**
or
PLSC 285 - Comparative Government II: Non-Western Political Systems **Credits: 3**
or
PLSC 389 - International Development Strategies **Credits: 3**

Six Courses from the Following:

*(if not taken as the required specialization course)

ANTH 271 - Cultural Area Studies: Africa **Credits: 3**
ANTH 272 - Culture Area: China **Credits: 3**
ANTH 274 - Cultural Area Studies: Latin America **Credits: 3**
ANTH 370 - Latinos and Diasporas **Credits: 3**

ASIA 200 - Introduction to Asian Studies **Credits: 3**
 ENGL 226 - Survey of Global Literature Since 1900 **Credits: 3**
 ENGL 398 - Global Genres **Credits: 3**
 ENGL 437
 ENGL 463 - Topics in Global Literature and Film **Credits: 3**
 FNLG 100
 FRNC 254
 GEOG 104 - World Geography: Global Context **Credits: 3**
 GEOG 254 - Geography of Russia, Central Eurasia, and Eastern Europe **Credits: 3**
 GEOG 255 - Geography of Africa **Credits: 3**
 GEOG 257 - Geography of South and Southwest Asia **Credits: 3**
 GEOG 331 - Population Geography **Credits: 3**
 HIST 206 - The History of East Asia **Credits: 3**
 HIST 208
 HIST 307 - History of Europe: 1815-1914 **Credits: 3**
 HIST 308
 HIST 311 - Rise and Fall of Hitler's Empire **Credits: 3**
 HIST 312 - Europe, 1914-1945: The Age of Dictators and Imperiled Democracies **Credits: 3**
 HIST 313 - Europe Since 1945: Division, Revolution, and Unity **Credits: 3**
 HIST 321
 HIST 322 - French Revolution and Napoleon **Credits: 3**
 HIST 323 - France, 1815 to the Present **Credits: 3**
 HIST 325
 HIST 327 - Soviet Union and Contemporary Russia **Credits: 3**
 HIST 331 - Modern Middle East **Credits: 3**
 HIST 351 - History of Latin America: National Period, 1820-Present **Credits: 3**
 HIST 356
 PLSC 280 - Comparative Government I: Western Political Systems **Credits: 3 ***
 PLSC 285 - Comparative Government II: Non-Western Political Systems **Credits: 3 ***
 PLSC 383 - Political Systems: Asia **Credits: 3**
 PLSC 384 - Political Systems: Middle East **Credits: 3**
 PLSC 387 - Political Systems: Latin America **Credits: 3**
 PLSC 389 - International Development Strategies **Credits: 3 ***
 PNAF 131 - Introduction to Pan-African Studies **Credits: 3**
 RLST 311 - Eastern Philosophy **Credits: 3**
 RLST 360 - African Religions **Credits: 3**
 RLST 370 - Religions: China and Japan **Credits: 3**
 RLST 372
 RLST 373
 RLST 374 - Buddhism **Credits: 3**
 RLST 380 - Islam **Credits: 3**
 SOC 271
 SOC 273
 SOC 274
 SPAN 342 - Spanish Cultures from the 19th Century to the Present **Credits: 3**
 SPAN 382 - Contemporary Spain **Credits: 3**
 SPAN 383 - Geography and History of Spain **Credits: 3**
 SPAN 384 - History of Spanish Art **Credits: 3**
 SPAN 385 - Survey of Spanish Literature **Credits: 3**
 SPAN 410 - Medieval Literature **Credits: 3**
 SPAN 411 - Golden Age Spanish **Credits: 3**
 SPAN 412 - The Spanish Novel of the 19th and 20th Centuries **Credits: 3**

Other Requirements:

(3)

Free Electives: 34-41

Total Degree Requirements: 120

- (1) Intermediate-level foreign language may be included in Liberal Studies electives.
- (2) Credits for PLSC 111 are counted in the Liberal Studies social science requirements.
- (3) Majors are strongly encouraged to take advantage of the study abroad opportunities available through IUP departmental programs and of exchange opportunities available through the Office of International Education.

Journalism and Public Relations, BA

Liberal Studies: 46-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

Social Science: 9

No courses with JRNL prefix to program requirements

Liberal Studies Electives: 6-8

No courses with JRNL or COMM prefix

College: 0-8

Foreign Language Intermediate Level (1, 6)

Major: 39

Required Courses:

- JRNL 102 - Basic Journalistic Skills **Credits:** 3 (2, 5)
- JRNL 105 - Journalism and the Mass Media **Credits:** 3 (2)
- JRNL 215 - Media Convergence in Journalism **Credits:** 3
- JRNL 220 - Writing for Media **Credits:** 3 (2)
- JRNL 328 - News Reporting **Credits:** 3 (2, 4)
- JRNL 347 - Journalism Law and Ethics **Credits:** 3
- JRNL 400 - Professional Preparation and Portfolio **Credits:** 3

Controlled Electives: 18

Other JRNL courses (as listed in this catalog) (3, 5)

Other Requirements:

Department recommends a planned program of dual major, minor(s), or electives (4)

Free Electives: 25-35

Total Degree Requirements: 120

- (1) Intermediate-level foreign language may be included in Liberal Studies electives.
- (2) A grade of "C" or better is required in these courses
- (3) A maximum of 6cr of internship can be applied to major.
- (4) Course is not eligible for transfer from any other institution.
- (5) The last 15cr in journalism and public relations must be taken at IUP.
- (6) The foreign language requirement applies to all double majors.

Literature/Culture Track, English, BA

The Literature/Culture Track enables students to design a course of study in the history, meaning, function, and aesthetics of texts of all kinds. A student who completes this major will be able to identify the unique material, symbolic, formal, and aesthetic qualities of texts; apply the analytical skills and methods best suited to comprehend the significance of texts; analyze the ways that texts interact with audience, culture, medium, and ideology; evaluate the role of theory—its methods, history, politics, and functions—in textual analysis; and examine the ways in which questions of race, gender, sexual orientation, and identity affect interactions with both traditional and nontraditional texts and theory. The Literature/Culture Track prepares students for any profession that requires strong analytic, communication, cultural, and aesthetic skills, and for academic study in literary and cultural studies.

Liberal Studies: 46

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities-Literature:

ENGL 122 - Introduction to English Studies **Credits: 3**

Mathematics: 3

Liberal Studies Electives: 6

No courses with ENGL prefix

College: 0-6

Foreign Language Intermediate Level (1)

Major: 36

Required Courses:

Literary Survey Courses: 6

Two literary survey courses from the following:

- ENGL 210 - British Literature to 1660 **Credits: 3**
- ENGL 211 - British Literature to 1660-1900 **Credits: 3**
- ENGL 212 - American Literature: Beginnings to 1900 **Credits: 3**
- ENGL 213 - British and American Literature Since 1900 **Credits: 3**
- ENGL 226 - Survey of Global Literature Since 1900 **Credits: 3**

Writing Course: 3

One writing course from the following:

- ENGL 220 - Advanced Composition **Credits: 3**
- ENGL 221 - Creative Writing **Credits: 3**
- ENGL 222 - Technical Writing **Credits: 3**

Literacies Course: 3

One literacies course from the following:

- ENGL 208 - Introduction to Film Studies **Credits: 3**
- ENGL 308 - Critical Theory **Credits: 3**
- ENGL 313 - Rhetorical Trends and Traditions **Credits: 3**

Capstone course:

- ENGL 484 - Topics in English Studies **Credits: 3**

Controlled Electives:

(2, 3)

Four Courses from the Following: 12

- ENGL 203 - Introduction to Language Studies **Credits: 3**
- ENGL 208 - Introduction to Film Studies **Credits: 3**
- ENGL 210 - British Literature to 1660 **Credits: 3**
- ENGL 211 - British Literature to 1660-1900 **Credits: 3**
- ENGL 212 - American Literature: Beginnings to 1900 **Credits: 3**
- ENGL 213 - British and American Literature Since 1900 **Credits: 3**
- ENGL 225 - Introduction to Literature by Women **Credits: 3**
- ENGL 226 - Survey of Global Literature Since 1900 **Credits: 3**
- ENGL 265 - Law and Literature **Credits: 3**
- ENGL 308 - Critical Theory **Credits: 3**
- ENGL 310 - Public Speaking **Credits: 3**
- ENGL 313 - Rhetorical Trends and Traditions **Credits: 3**
- ENGL 328 - Introduction to Linguistics **Credits: 3**
- ENGL 329 - The History of the English Language **Credits: 1**
- ENGL 332 - Film Genres **Credits: 3**
- ENGL 335 - Literary Nonfiction **Credits: 3**
- ENGL 336 - Language, Gender, and Society **Credits: 3**
- ENGL 337 - Myth **Credits: 3**
- ENGL 341 - Poetry **Credits: 3**
- ENGL 342 - Short Fiction **Credits: 3**
- ENGL 343 - Drama **Credits: 3**

ENGL 344 - Ethnic American Literature **Credits:** 3
ENGL 348 - African American Literature **Credits:** 3
ENGL 350 - Gender and Sexual Orientation in Literature, Theory, and Film **Credits:** 3
ENGL 361 - Environmental Literature **Credits:** 3
ENGL 398 - Global Genres **Credits:** 3
ENGL 434 - Shakespeare **Credits:** 3
ENGL 436 - Major American Authors **Credits:** 3
ENGL 440 - Major Figures in Film **Credits:** 3
ENGL 450 - Film Theory **Credits:** 3
ENGL 460 - Topics in Film **Credits:** 3
ENGL 463 - Topics in Global Literature and Film **Credits:** 3
ENGL 493 - Internship **Credits:** 3-12

ENGL Prefix: 9

Three courses with ENGL prefix except

ENGL 100 - Basic Writing **Credits:** 3
ENGL 101 - Composition I **Credits:** 3
ENGL 121 - Humanities Literature **Credits:** 3
ENGL 122 - Introduction to English Studies **Credits:** 3
ENGL 202 - Composition II **Credits:** 3

Free Electives: 31-38

Total Degree Requirements: 120

- (1) Intermediate-level foreign language may be included in Liberal Studies electives.
- (2) An internship, aside from counting for up to 6cr toward the major, makes the BA degree recipient much more employable by providing job experience. Students should see the English BA internship director for advice about available openings.
- (3) Courses used to fulfill core requirements cannot also be used to fulfill track requirements.

Music, BA

Liberal Studies: 46

As outlined in the Liberal Studies Requirements with the following specifications:

Fine Arts:

MUHI 102 - Music and Literature Survey **Credits:** 3

Humanities Literature:

One course from ENGL 210-ENGL 214, ENGL 225-ENGL 226, or ENGL 340 -ENGL 398

Mathematics:

MATH 101 - Foundations of Mathematics **Credits:** 3 or other Liberal Studies Mathematics

Natural Science:

Option II recommended

PHYS 105 - The Physics of Light and Sound **Credits:** 3 recommended

Social Science:

PSYC 101 - General Psychology **Credits:** 3

Liberal Studies Elective: 3

MUHI 301 - Music History I **Credits:** 3

No courses with MUSC prefix

Major: 39

Required Courses:

APMU (Primary) Applied Music I-VI (2cr each) **Credits:** 12

APMU 427 - Capstone Jury: Primary Instrument **Credits:** 0

MUHI 302 - Music History II **Credits:** 3

MUSC 111 - Theory Skills I **Credits:** 2

MUSC 112 - Theory Skills II **Credits:** 2

MUSC 115 - Theory I **Credits:** 3

MUSC 116 - Theory II **Credits:** 3

MUSC 153 - Class Piano I **Credits:** 1

MUSC 154 - Class Piano II **Credits:** 1

MUSC 180 - Technology for General Musicianship **Credits:** 2

MUSC 211 - Theory Skills III **Credits:** 2

MUSC 212 - Theory Skills IV **Credits:** 2

MUSC 215 - Theory III **Credits:** 3

MUSC 216 - Theory IV **Credits:** 3

MUSC 475 - Music Lab **Credits:** 0 (8 semesters of recital attendance)

Controlled Electives: 3

APMU 126 - Piano Proficiency Level I **Credits:** 0

MUSC 217 - Keyboard Harmony **Credits:** 3 (required for piano and organ majors only)

MUSC 351 - Italian Diction and Literature **Credits:** 1

MUSC 353 - French Diction and Literature **Credits:** 1

MUSC 354 - German Diction and Literature **Credits:** 1 (required for voice majors only)

MUSC 120-MUSC 140 (4 semesters of music ensembles) **Credits:** 0-3

Free Electives: 32

(1)

Total Degree Requirements: 120

1) Students are encouraged to consider a minor in another department.

Musical Theatre Track, Theatre, BA

The **BA in Theatre, Musical Theatre Track** degree offers students knowledge of and training in all aspects of musical theatre within a liberal arts. Students entering the program will be advised to explore many dimensions of theatre, music, and dance and develop as singing actors with well-developed additional skills and knowledge. Successful graduates will be able to compete for employment opportunities in the entertainment industry where musical talent is utilized. They will be capable of applying their learning to a wide variety of career options including, but not limited to, performance. For students intent on a professional career in performance, additional learning through free electives (and even a minor area of study) is advised in acting, voice training, music proficiency, and dance.

The program combines strengths of the voice program of the Music Department with the performance programs of the Theatre, Dance and Performance Department. An audition for both departments is required for entry into this challenging program.

Musical Theatre students will perform in main stage musicals of all genres, cabaret offerings, and studio performances.

As a practical extension of the academic program, the department offers a variety of production opportunities in the Theater-by-the-Grove main stage and studio theaters. The IUP Dance Theater performs twice annually.

Admission to the Theatre program requires satisfactory completion of an audition or interview, in addition to the university's general admission requirements. Audition information is available at www.iup.edu/theater.

The Department of Theatre, Dance and Performance is a fully accredited institutional member of the National Association of Schools of Theatre (NAST).

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Fine Arts:

MUHI 101 - Introduction to Music **Credits: 3**

or

DANC 102 - Introduction to Dance **Credits: 3**

Mathematics: 3

Liberal Studies Electives: 6

No courses with THTR prefix

Major: 42

(1)

Foundation Studies Courses: 14

MUSC 111 - Theory Skills I **Credits: 2**

MUSC 115 - Theory I **Credits: 3**

THTR 111 - Foundations of Theater **Credits: 3**

THTR 211 - History and Literature: Classical **Credits: 3**

or

THTR 212 - History and Literature: Renaissance **Credits: 3**

THTR 371 - Musical Theater History **Credits: 3**

Core Skills Courses: 19

APMU 105 - Voice I **Credits: 1**
APMU 155 - Voice II **Credits: 1**
APMU 205 - Voice II **Credits: 1**
APMU 255 - Voice III **Credits: 1**
DANC 260 - Beginning Jazz Dance **Credits: 3**
or
DANC 485 - Dance Studio **Credits: 3** (Jazz) (2)
DANC 280 - Beginning Ballet **Credits: 3**
or
DANC 485 - Dance Studio **Credits: 3** (Ballet) (2)
THTR 240 - Acting I **Credits: 3** (3)
THTR 372 - Musical Theater Auditioning **Credits: 3**

One of the Following:

THTR 116 - Fundamentals of Theatrical Design **Credits: 3**
THTR 120 - Stagecraft **Credits: 3**
THTR 122 - Costume Workshop **Credits: 3**
THTR 221 - Basic Stage Lighting **Credits: 3**
THTR 226 - Stage Management **Credits: 3**

Experiential Learning: 5

(4)

MUSC 126 - Music Theater **Credits: 0/1** (5)
MUSC 128 - Opera/Musical in Production Ensemble **Credits: 0/1** (5)
THTR 486 - Practicum in Production **Credits: 0-3** (6)
THTR 493 - Internship **Credits: 3-12**

Electives: 3

Select 3 cr from the following:

DANC 270 - Beginning Ballroom and Tap Dance **Credits: 3**
DANC 485 - Dance Studio **Credits: 3**
MUSC 153 - Class Piano I **Credits: 1**
THTR 340 - Acting II **Credits: 3**
THTR 350 - Directing **Credits: 3**
THTR 373 - Musical Theater Scene Study **Credits: 3**
THTR 471 - Musical Theater Performance **Credits: 3**

Capstone: 1

THTR 480 - Theater Seminar **Credits: 1**

Free Electives: 28-29

Total Degree Requirements: 120

(1) Students must achieve a "C" or better in all major courses to graduate.

(2) Level of dance studio competence will determine placement by faculty.

(3) Proficiency in acting studio fundamentals is prerequisite. Students who do not demonstrate proficiency at audition will be required to take THTR 140.

(4) Completion of eight different production experiences required.

(5) Proficiency in music theory is prerequisite. Students who do not demonstrate proficiency at audition will be required to take MUSC 110.

(6) Repeated for credit.

Philosophy, BA

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

Liberal Studies Electives: 6

No courses with PHIL prefix

College: 0-8

Foreign Language Intermediate Level (1)

Major: 30

Required Courses:

PHIL 221 - Symbolic Logic I **Credits: 3**

PHIL 324 - Ancient Greek Philosophy **Credits: 3**

PHIL 325 - Early Modern European Philosophy **Credits: 3**

Controlled Electives:

Three PHIL courses (9cr) (with restrictions) **Credits: 9 (2, 3)**

Two Courses from the Following:

At least two courses from the following two categories

Knowledge and Reality: 6

Six credits from the following:

PHIL 330 - Philosophy of Science **Credits: 3**

PHIL 350 - The Human Experience of Time **Credits: 3**

PHIL 360 - Philosophy of Mind **Credits: 3**

PHIL 390 - Philosophy of Human Nature **Credits: 3**

PHIL 420 - Metaphysics **Credits: 3**

PHIL 421 - Theory of Knowledge **Credits:** 3
PHIL 460 - Philosophy of Language **Credits:** 3

Ethics and Values: 6

Six credits from the following:

PHIL 223 - Philosophy of Art **Credits:** 3
PHIL 240 - Philosophy and the Good Life **Credits:** 3
PHIL 270 - Ethics and the Environment **Credits:** 3
PHIL 320 - Ethical Theory **Credits:** 3
PHIL 323 - Political Philosophy **Credits:** 3
PHIL 326 - Existentialism **Credits:** 3
PHIL 450 - Philosophy of Law **Credits:** 3

Free Electives: 35-44

Total Degree Requirements: 120

(1) Intermediate-level foreign language may be included in Liberal Studies electives.

(2) In addition to PHIL 221, no more than four 100- and 200-level courses may be counted toward the major. Only PHIL courses may be counted toward the major.

(3) No more than 9 non-classwork credits may be counted toward the major. Non-classwork credits include independent study, independent honors project, and internship in philosophy.

Political Science, BA

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

Social Science:

PLSC 111 - American Government **Credits:** 3

Liberal Studies Electives: 6

No courses with PLSC prefix

College: 0-6

Foreign Language Intermediate Level (1)

Major: 33

Required Courses:

PLSC 101 - World Politics **Credits:** 3 (2)
PLSC 111 - American Government **Credits:** 3 (3)
PLSC 260 - Contemporary Political Ideas **Credits:** 3
PLSC 300 - Research Methods in Political Science **Credits:** 3

Controlled Electives: 24

At least one course in three of the four areas:

American Studies:

PLSC 251 - State and Local Political Systems **Credits:** 3
PLSC 346
PLSC 350 - The Presidency **Credits:** 3
PLSC 351 - Legislative Process **Credits:** 3
PLSC 353
PLSC 354 - Metropolitan Problems **Credits:** 3
PLSC 355 - Intergovernmental Relations **Credits:** 3
PLSC 356
PLSC 358 - Judicial Process **Credits:** 3
PLSC 359 - Constitutional Law and Civil Liberties **Credits:** 3

Political Theory:

PLSC 360 - Classical Political Thought **Credits:** 3
PLSC 361 - Modern Political Thought **Credits:** 3

Public Policy and Administration:

PLSC 250 - Public Policy **Credits:** 3
PLSC 370 - The Practice of Public Administration **Credits:** 3

International Studies:

PLSC 280 - Comparative Government I: Western Political Systems **Credits:** 3
PLSC 282 - International Relations **Credits:** 3
PLSC 283 - American Foreign Policy **Credits:** 3
PLSC 285 - Comparative Government II: Non-Western Political Systems **Credits:** 3
PLSC 382 - Political Systems: Africa **Credits:** 3
PLSC 383 - Political Systems: Asia **Credits:** 3
PLSC 384 - Political Systems: Middle East **Credits:** 3
PLSC 385 - Political Systems: Central and Eastern Europe **Credits:** 3
PLSC 387 - Political Systems: Latin America **Credits:** 3
PLSC 388 - Dimensions of National Security **Credits:** 3
PLSC 389 - International Development Strategies **Credits:** 3
PLSC 422 - International Law and Organizations **Credits:** 3
PLSC 465 - Intelligence Process and Policy **Credits:** 3 (4)

Free Electives: 34-41

Total Degree Requirements: 120

- (1) Intermediate-level foreign language may be included in Liberal Studies electives.
- (2) PLSC 101 satisfies the global and multicultural awareness requirement.
- (3) Credits for PLSC 111 are counted in the Liberal Studies social science requirements.
- (4) PLSC 280 and/or PLSC 285 recommended as prerequisite to PLSC 380 through PLSC 389.

Pre-law Track, Criminology, BA

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 217 - Probability and Statistics **Credits: 3**

Natural Science:

recommended:

CHEM 111 - General Chemistry I **Credits: 4**

CHEM 112 - General Chemistry II **Credits: 4**

or

BIOL 103 - Life on Earth **Credits: 4**

BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**

Social Science:

CRIM 101 - Crime and Justice Systems **Credits: 3**

Liberal Studies Electives: 6

No courses with CRIM prefix

Major: 33

Required Courses:

CRIM 102 - Survey of Criminology **Credits: 3**

CRIM 306 - Criminological Research Methods **Credits: 3**

CRIM 400 - Theoretical Criminology **Credits: 3**

CRIM 401 - Contemporary Issues in Criminology **Credits: 3**

CRIM 403 - Dilemmas in Criminology and Criminal Justice **Credits: 3**

Controlled Electives:

Two courses from each group:

Group A: The Criminal Justice System: 6

CRIM 205 - Policing and the Community **Credits: 3**
CRIM 215 - Survey of Courts and the Criminal Justice System **Credits: 3**
CRIM 225 - Survey of Corrections **Credits: 3**
CRIM 235 - Survey of Juvenile Justice and Juvenile Law **Credits: 3**
CRIM 255 - Law, Social Control, and Society **Credits: 3**

Group B: Critical Issues in Criminology 6

CRIM 344 - Terrorism **Credits: 3**
CRIM 354 - White-Collar Crime **Credits: 3**
CRIM 374 - Environmental Crime and Justice **Credits: 3**
CRIM 384 - Violence and Victimology **Credits: 3**
CRIM 394 - Crime and Delinquency Prevention **Credits: 3**

Group C: Diversity Issues in Criminology 6

CRIM 410 - Race, Ethnicity, Social Structure, and Crime **Credits: 3**
CRIM 450 - Women and Crime **Credits: 3**
CRIM 470 - Comparative Study of Justice **Credits: 3**

Other Requirements: Pre-law Interdisciplinary Track: 15-21

Seven courses, including at least one from each of six areas:

Business:

ACCT 201 - Accounting Principles I **Credits: 3**
ACCT 202 - Accounting Principles II **Credits: 3**
BLAW 235 - Legal Environment of Business **Credits: 3**

Economics:

ECON 121 - Principles of Macroeconomics **Credits: 3**
ECON 122 - Principles of Microeconomics **Credits: 3**
ECON 332

English:

ENGL 212 - American Literature: Beginnings to 1900 **Credits: 3**
ENGL 227 - Introduction to Legal Writing **Credits: 3**
ENGL 265 - Law and Literature **Credits: 3**
ENGL 310 - Public Speaking **Credits: 3**
ENGL 321 - Persuasive Speech and Writing **Credits: 3**

History:

HIST 320 - History of England to 1688 **Credits: 3**
HIST 341 - American Revolution **Credits: 3**
HIST 342 - The Early Republic **Credits: 3**
HIST 346 - Recent United States History **Credits: 3**
HIST 475 - History of American Constitutionalism **Credits: 3**

Philosophy:

PHIL 101 - Critical Thinking **Credits:** 3
PHIL 122 - Contemporary Moral Issues **Credits:** 3
PHIL 130 - Introduction to Biomedical Ethics **Credits:** 3
PHIL 221 - Symbolic Logic I **Credits:** 3
PHIL 270 - Ethics and the Environment **Credits:** 3
PHIL 320 - Ethical Theory **Credits:** 3
PHIL 450 - Philosophy of Law **Credits:** 3

Political Science:

PLSC 358 - Judicial Process **Credits:** 3
PLSC 359 - Constitutional Law and Civil Liberties **Credits:** 3
PLSC 361 - Modern Political Thought **Credits:** 3
PLSC 405 - Sexuality and Law **Credits:** 3

Free Electives: 19-26

Total Degree Requirements: 120

Pre-law Track, Political Science, BA

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

Social Science:

PLSC 111 - American Government **Credits:** 3

Liberal Studies Electives: 6

No course with PLSC prefix

College: 0-6

Foreign Language Intermediate Level (1)

Major: 33

Required Courses:

PLSC 101 - World Politics **Credits:** 3 (2)
PLSC 111 - American Government **Credits:** 3 (3)
PLSC 260 - Contemporary Political Ideas **Credits:** 3
PLSC 300 - Research Methods in Political Science **Credits:** 3

Controlled Electives: 24

At least one course in three of the four areas:

American Studies:

- PLSC 251 - State and Local Political Systems **Credits: 3**
- PLSC 346
- PLSC 350 - The Presidency **Credits: 3**
- PLSC 351 - Legislative Process **Credits: 3**
- PLSC 353
- PLSC 354 - Metropolitan Problems **Credits: 3**
- PLSC 355 - Intergovernmental Relations **Credits: 3**
- PLSC 356
- PLSC 358 - Judicial Process **Credits: 3**
- PLSC 359 - Constitutional Law and Civil Liberties **Credits: 3**

Political Theory:

- PLSC 360 - Classical Political Thought **Credits: 3**
- PLSC 361 - Modern Political Thought **Credits: 3**

Public Policy and Administration:

- PLSC 250 - Public Policy **Credits: 3**
- PLSC 370 - The Practice of Public Administration **Credits: 3**

International Studies:

- PLSC 280 - Comparative Government I: Western Political Systems **Credits: 3**
- PLSC 282 - International Relations **Credits: 3**
- PLSC 283 - American Foreign Policy **Credits: 3**
- PLSC 285 - Comparative Government II: Non-Western Political Systems **Credits: 3**
- PLSC 382 - Political Systems: Africa **Credits: 3**
- PLSC 383 - Political Systems: Asia **Credits: 3**
- PLSC 384 - Political Systems: Middle East **Credits: 3**
- PLSC 385 - Political Systems: Central and Eastern Europe **Credits: 3**
- PLSC 387 - Political Systems: Latin America **Credits: 3**
- PLSC 388 - Dimensions of National Security **Credits: 3**
- PLSC 389 - International Development Strategies **Credits: 3**
- PLSC 422 - International Law and Organizations **Credits: 3**
- PLSC 465 - Intelligence Process and Policy **Credits: 3 (4)**

Other Requirements: Pre-law Interdisciplinary Track: 21

Seven courses, including at least one from each of six areas:

Business:

- ACCT 201 - Accounting Principles I **Credits: 3**
- ACCT 202 - Accounting Principles II **Credits: 3**
- BLAW 235 - Legal Environment of Business **Credits: 3**

Criminology:

CRIM 210 - Criminal Law **Credits: 3**
CRIM 215 - Survey of Courts and the Criminal Justice System **Credits: 3**
CRIM 225 - Survey of Corrections **Credits: 3**
CRIM 255 - Law, Social Control, and Society **Credits: 3**

Economics:

ECON 121 - Principles of Macroeconomics **Credits: 3**
ECON 122 - Principles of Microeconomics **Credits: 3**
ECON 332

English:

ENGL 212 - American Literature: Beginnings to 1900 **Credits: 3**
ENGL 227 - Introduction to Legal Writing **Credits: 3**
ENGL 265 - Law and Literature **Credits: 3**
ENGL 310 - Public Speaking **Credits: 3**
ENGL 321 - Persuasive Speech and Writing **Credits: 3**

History:

HIST 320 - History of England to 1688 **Credits: 3**
HIST 341 - American Revolution **Credits: 3**
HIST 342 - The Early Republic **Credits: 3**
HIST 346 - Recent United States History **Credits: 3**
HIST 475 - History of American Constitutionalism **Credits: 3**

Philosophy:

PHIL 101 - Critical Thinking **Credits: 3**
PHIL 122 - Contemporary Moral Issues **Credits: 3**
PHIL 130 - Introduction to Biomedical Ethics **Credits: 3**
PHIL 221 - Symbolic Logic I **Credits: 3**
PHIL 270 - Ethics and the Environment **Credits: 3**
PHIL 320 - Ethical Theory **Credits: 3**
PHIL 450 - Philosophy of Law **Credits: 3**

Free Electives: 13-20

Total Degree Requirements: 120

- (1) Intermediate-level foreign language may be included in Liberal Studies electives.
- (2) PLSC 101 satisfies the global and multicultural awareness requirement.
- (3) Credits for PLSC 111 are counted in the Liberal Studies social science requirements.
- (4) PLSC 280 and/or PLSC 285 recommended as prerequisite to PLSC 380 through PLSC 389.

Psychology, BA

Liberal Studies: 43-44

As outlined in Liberal Studies Requirements section with the following specifications:

Mathematics:

MATH 217 - Probability and Statistics **Credits:** 3

Natural Science:

BIOL 104 - Human Biology: How the Human Body Works **Credits:** 4 recommended

BIOL 106 - Human Genetics and Health **Credits:** 3 recommended

Social Science:

PSYC 101 - General Psychology **Credits:** 3

Liberal Studies Elective: 3

No course with PSYC prefix (1)

Major: 42

Required Courses:

PSYC 100 - The Psychology Major: Curriculum and Careers **Credits:** 1

PSYC 102 - Identity and Interactions in a Diverse World **Credits:** 2

PSYC 200 - Psychological Research I **Credits:** 3

PSYC 215 - Developmental Psychology **Credits:** 3

PSYC 225 - Abnormal Psychology **Credits:** 3

PSYC 235 - Social Psychology **Credits:** 3

PSYC 245 - Learning and Cognition **Credits:** 3

PSYC 255 - Biopsychology **Credits:** 3

PSYC 300 - Psychological Research II: Quantitative Research Methods **Credits:** 3

or

PSYC 301 - Psychological Research II: Qualitative Research Methods **Credits:** 3

PSYC 460 - Senior Seminar in Psychology **Credits:** 3

One specialization required: (2)

Psychological Science Specialization: 15

Controlled Electives: 6

Two courses with different course numbers from the following:

PSYC 415 - Advanced Topics in Developmental Psychology **Credits:** 3

PSYC 435 - Advanced Topics in Social Psychology **Credits:** 3

PSYC 445 - Advanced Topics in Learning and Cognition **Credits:** 3

PSYC 450 - Counseling Skills **Credits: 3**

PSYC 455 - Advanced Topics in Biological Psychology **Credits: 3**

Three Additional PSYC Electives: 9

Applied Psychology Specialization: 15

PSYC 150 - Introduction to Applied Psychology **Credits: 3**

PSYC 390 - Industrial-Organizational Psychology **Credits: 3**

or

PSYC 450 - Counseling Skills **Credits: 3**

PSYC 493 - Psychological Practicum **Credits: 1-12 (3 cr. needed)**

Controlled Electives: 6

Two courses from the following:

PSYC 322 - Violence Across the Life Span **Credits: 3**

PSYC 325 - Psychological Testing and Measurement **Credits: 3**

PSYC 331 - Environmental Psychology **Credits: 3**

PSYC 332 - Community Psychology and Prevention Science (CAAST) **Credits: 3**

PSYC 372 - Drugs and Behavior **Credits: 3**

PSYC 374 - Stress and Coping **Credits: 3**

PSYC 377 - Interpersonal Skills and Group Dynamics **Credits: 3**

PSYC 378 - Psychology of Death and Dying **Credits: 3**

PSYC 388 - Forensic Psychology **Credits: 3**

Other Requirements: 18-24

Foreign Language Intermediate Level **Credits: 0-6**

Minor/concentration (3) **Credits: 18**

Free Electives: 10-17

Total Degree Requirements: 120

(1) Intermediate-level foreign language may be included in Liberal Studies electives.

(2) Specialization selected in consultation with advisor.

(3) Concentration plan developed in consultation with advisor.

Religious Studies, BA

Liberal Studies: 46-48

As outlined in Liberal Studies Requirements section with the following specifications:

Mathematics: 3

Liberal Studies Electives: 6-9

No courses with RLST prefix

College: 0-8

Foreign Language Intermediate Level (1)

Major: 30

Controlled Electives:

(2)

Core:

RLST 300 - Methodologies of Religious Studies **Credits: 3**

Abrahamic:

RLST 380 - Islam **Credits: 3**

or

RLST 385 - Christianity **Credits: 3**

or

RLST 388 - Interpreting the Bible **Credits: 3**

Asian:

RLST 311 - Eastern Philosophy **Credits: 3**

RLST 370 - Religions: China and Japan **Credits: 3**

RLST 374 - Buddhism **Credits: 3**

RLST 375 - Religions of India **Credits: 3**

RLST 378 - Hinduism **Credits: 3**

Indigenous:

RLST 360 - African Religions **Credits: 3**

or

RLST 365 - Native North American Religions **Credits: 3**

Capstone Course

One capstone course:

RLST 401 - Topics in Abrahamic Traditions **Credits: 3**

RLST 402 - Topics in Asian Religions **Credits: 3**

RLST 403 - Topics in Indigenous Religions **Credits: 3**

Additional RLST Courses

Five additional RLST courses **Credits: 15 (3)**

Free Electives: 34-44

Total Degree Requirements: 120

- (1) Intermediate-level foreign language may be included in the Liberal Studies electives.
- (2) Other courses may be approved in consultation with advisor.
- (3) Consult religious studies advisor.

Spanish, BA

The department offers a varied curriculum to provide not only basic language instruction in Spanish, but also the more advanced competencies needed by language specialists and students hoping to take advantage of an international study experience. For the undergraduate Spanish major, the department has two degree programs: the BSEd and the BA program with a major in Spanish.

Students majoring in Spanish will acquire proficiency in all phases of the language and enter more deeply into the history, culture, and literature of Spanish-speaking countries. Spanish majors generally find employment in government work, librarianship, journalism and public relations, foreign trade, airlines, tourism, business, criminology, and teaching. Students choosing careers as secondary school teachers will find the close supervision and advanced methodology offered by the department a distinct asset.

Placement

Students with previous Spanish study in high school will be placed into the appropriate course levels by means of a written departmental exam, administered before the beginning of the semester. In addition, students judged to be native or heritage speakers (either through the written placement exam or by classroom instructors), will have their speaking proficiency assessed by an oral proficiency tester in the Department of Foreign Languages who is currently certified by the American Council on the Teaching of Foreign Languages (ACTFL). Students who receive an advisory oral proficiency rating of Advanced Low level on the oral proficiency scale developed by ACTFL will not be permitted to enroll in SPAN 101, SPAN 102, SPAN 201, or SPAN 220. Students who receive an advisory oral proficiency rating of Advanced-Mid level or higher will not be permitted to enroll in SPAN 101, SPAN 102, SPAN 201, SPAN 220, SPAN 350, or SPAN 450. Students who are rated in the advanced range are encouraged to seek course credit for their oral proficiency levels by applying through the American Council on Education (ACE) Credit Recommendation Service in conjunction with Language Testing International (LTI) (see next section). In the case of Spanish majors and minors who place out of the courses listed as a result of having the advanced-level oral proficiency and choose NOT to pursue ACE credits, SPAN 201 will be waived (no credits granted), and students will need to seek other Spanish classes in place of the required SPAN 220 and SPAN 350 courses.

No student will be permitted to register for or take a D/F repeat in SPAN 101, SPAN 102, or SPAN 201 when credit has already been received for a higher-numbered course. No student will be permitted to register for or take a D/F repeat in SPAN 220 when credit has already been received for SPAN 350 and/or SPAN 450.

Course Credit for Oral Proficiency Levels

Incoming students may receive course credit for their oral proficiency levels in Spanish through the American Council on Education (ACE) Credit Recommendation Service and Language Testing International (LTI), the assessment agency for the American Council on the Teaching of Foreign Languages (ACTFL). Students who have taken an ACTFL Oral Proficiency Interview (OPI) through LTI, received a proficiency rating by LTI, and received credit recommendation by ACE may receive the following course credits in Spanish at IUP:

ACTFL Oral Proficiency Ratings (rated by LTI)	ACE Credit Recommendations	IUP Spanish Course Equivalencies
Intermediate-Mid	4 Lower Division credits	Either SPAN 102 or SPAN 201, depending on placement on departmental written exam

Intermediate-High/Advanced Low	8 Lower Division credits	SPAN 201 and SPAN 220
Advanced-Mid	10 Lower Division credits	SPAN 201 and SPAN 220 and SPAN 350
Advanced-High/Superior	10 Lower Division credits and 3 Upper Division credits	SPAN 201 and SPAN 220 and SPAN 350 and SPAN 450

To begin the process, students must contact LTI by e-mail (testing@language-testing.com) to request an ACE College Credit Recommendation by OPI Examination information package and application. There is a fee for the OPI and an ACE application fee.

Study Abroad

Study Abroad: The university has established study-abroad centers in Spain, Mexico, France, and Costa Rica. The program in Valladolid, Spain, is a second-semester-only program, whereas the ones in Mexico and Costa Rica are summer programs. All majors are required to participate in study abroad; nonmajors are also accepted into these programs. The 18 credits in Spain, 7 credits in Mexico, 6 credits in France, or 4 credits in Costa Rica are applicable, all or in part, to a major, minor, or certificate in Spanish and French (as applicable). Students interested in more information should contact the department.

Liberal Studies:46-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

Liberal Studies Electives: 6

No courses with SPAN prefix

College:

Foreign Language (included in major)

Major: 33-37

Study Abroad (1)

Required Courses:

- SPAN 201 - Intermediate Spanish **Credits:** 4 (2)
- SPAN 220 - Intermediate Spanish Conversation **Credits:** 3
- SPAN 230 - Intermediate Spanish Composition and Grammar **Credits:** 3
- SPAN 260 - Introduction to Hispanic Literature **Credits:** 3
- SPAN 330 - Advanced Spanish Composition and Grammar **Credits:** 3
- SPAN 340 - Hispanic Cultures into the 19th Century **Credits:** 3
- SPAN 342 - Spanish Cultures from the 19th Century to the Present **Credits:** 3
- or
- SPAN 344 - Spanish-American Cultures from the 19th Century to the Present **Credits:** 3
- SPAN 350 - Advanced Spanish Conversation **Credits:** 3
- SPAN 362 - Survey of Peninsular Literature **Credits:** 3
- or
- SPAN 364 - Survey of Spanish-American Literature **Credits:** 3

Controlled Electives:

Any two courses from those numbered 400-431 **Credits: 6**

Any 3cr in SPAN courses 342 or above except SPAN 390 **Credits: 3**

Free Electives: 36-41

Total Degree Requirements: 120

(1) Students must successfully complete a program of language study in a Spanish-speaking country. This program must, as a minimum, last four weeks and carry 3 or more credits extending beyond the intermediate level. Students may fulfill this requirement by participating in any of the programs primarily administered by faculty of IUP's Department of Foreign Languages. Students wishing to fulfill this requirement through any other study abroad program must obtain prior approval from the department. Requests for exemptions to this requirement must be initiated by the student in writing and submitted to the department chair.

(2) Students for whom SPAN 201 is waived (by means of placement tests) only need 33 credits in Spanish courses

Studio Track, Art, BA

Liberal Studies: 43-44

As outlined in the Liberal Studies Requirements with the following specifications:

Fine Arts:

ARHI 205 - Ancient to Medieval Art **Credits: 3**

Mathematics: 3

Liberal Studies Elective: 3

ARHI 207 - Renaissance through Modern Art **Credits: 3**

No courses with ART prefix

Major:

Foundation Required: 12

ART 111 - Figure Drawing **Credits: 3**

ART 112 - Fundamentals of Drawing **Credits: 3**

ART 113 - Three-Dimensional Design **Credits: 3**

ART 114 - Color and Two-Dimensional Design **Credits: 3**

Beginning Studio Electives: 12

Four of the following nine courses:

ART 211 - Painting **Credits: 3**

ART 213 - Woodworking: Function and Form **Credits: 3**

ART 214 - Ceramics **Credits: 3**

ART 215 - Sculpture **Credits: 3**

ART 217 - Print Media **Credits:** 3
ART 218 - Introduction to Graphic Design **Credits:** 3
ART 219
ART 281 - Special Topics **Credits:** 1-3 (may be used only once)

Art History Required: 6

ARHI 100 - Arts of the 20th Century **Credits:** 3
Controlled ARHI Elective: One course from any 300-400 level ARHI prefix

Intermediate/Advanced Studio Required: 12

Select 300-400 level courses from four different studio areas (1, 2)

ART 356 - Intermediate Graphic Design II **Credits:** 3
ART 421 - Advanced Drawing **Credits:** 3
ART 451 - Advanced Woodworking: Function and Form **Credits:** 3
ART 452 - Advanced Ceramics **Credits:** 3
ART 453 - Advanced Sculpture **Credits:** 3
ART 454 - Advanced Painting **Credits:** 3
ART 455 - Modeling and Animation **Credits:** 3-6
ART 456 - Advanced Web and Interactive Design **Credits:** 3-6
ART 457 - Advanced Print Media **Credits:** 3-6
ART 459 - Advanced Fibers **Credits:** 3
ART 460 - Advanced Jewelry and Metals **Credits:** 3
ART 481 - Special Topics **Credits:** 1-3
ART 493 - Internship **Credits:** 3-12

Free Electives: 34-35

Total Degree Requirements: 120

See advisory paragraph "Timely Completion of Degree Requirements" in the section on Requirements for Graduation.

(1) Students must complete 3cr within an advanced studio before permission will be granted to enroll in the 6cr component of the advanced level. Permission of the instructor is a prerequisite to all 6cr advanced courses.

(2) Inclusion of internship credits toward any portion of fulfillment of degree requirements must be approved by the departmental chair and student's major advisor. Approval must be obtained in writing before enrollment. Students must complete the Sophomore Review.

Theatre, BA

Liberal Studies: 43-44

As outlined in the Liberal Studies Requirements with the following specifications:

Fine Arts:

Any except:

THTR 101 - Introduction to Theatre **Credits:** 3

Mathematics: 3

Liberal Studies Electives: 3

No courses with THTR prefix

Major: 42

(1)

Foundation Courses:

THTR 111 - Foundations of Theater **Credits: 3**

THTR 116 - Fundamentals of Theatrical Design **Credits: 3**

THTR 211 - History and Literature: Classical **Credits: 3**

or

THTR 212 - History and Literature: Renaissance **Credits: 3**

THTR 213 - History and Literature: Modern and Contemporary **Credits: 3**

Core Skills Courses:

THTR 120 - Stagecraft **Credits: 3**

THTR 122 - Costume Workshop **Credits: 3**

THTR 140 - Foundations of Performance **Credits: 3**

THTR 226 - Stage Management **Credits: 3**

Theater Electives in Concentration Areas:

Choose one area:

Design/Tech/Management Area

THTR 225 - Theater Graphics **Credits: 3**

THTR 489 - Design/Technology/Management Studio **Credits: 3**

Electives: 6

Two courses from the following:

DANC 355 - Dance Production: Administration to Creation **Credits: 3**

THTR 221 - Basic Stage Lighting **Credits: 3**

THTR 223 - Makeup for the Stage **Credits: 3**

THTR 320 - Scene Design **Credits: 3**

THTR 321 - Stage Lighting Design **Credits: 3**

THTR 322 - Costume Design **Credits: 3**

THTR 323 - Sound Design **Credits: 3**

THTR 324 - Advanced Stagecraft **Credits: 3**

Performance Area

THTR 130 - Stage Voice **Credits: 3**

or

THTR 131 - Stage Movement **Credits: 3**

THTR 240 - Acting I **Credits: 3**

THTR 340 - Acting II **Credits: 3**

Electives: 3

One course from the following:

- DANC 485 - Dance Studio **Credits: 3**
- THTR 231 - Improvisation and Creativity **Credits: 3**
- THTR 341 - Acting Styles **Credits: 3**
- THTR 342 - Acting Shakespeare **Credits: 3**
- THTR 350 - Directing **Credits: 3**
- THTR 487 - Acting Studio **Credits: 3**

Theory and Criticism Area

- THTR 310 - Theater Criticism **Credits: 3**
- THTR 311 - Dramaturgy **Credits: 3**

Electives:

Two courses from the following:

- THTR 350 - Directing **Credits: 3**
- ENGL 308 - Critical Theory **Credits: 3**
- ENGL 343 - Drama **Credits: 3**
- ENGL 350 - Gender and Sexual Orientation in Literature, Theory, and Film **Credits: 3**
- ENGL 434 - Shakespeare **Credits: 3**
- ENGL 450 - Film Theory **Credits: 3**
- ENGL 460 - Topics in Film **Credits: 3**
- ENGL 463 - Topics in Global Literature and Film **Credits: 3**
- ENGL 466 - Topics in Theory **Credits: 3**

General Studies Area

- THTR and/or DANC prefix courses as advised **Credits: 12**

Production Practicum:

- (2)
THTR 486 - Practicum in Production **Credits: 0-3**

Capstone:

- THTR 480 - Theater Seminar **Credits: 1**

Free Electives: 34-35

Total Degree Requirements: 120

(1) Students must achieve a "C" or better in all major courses to graduate.

(2) Students are required to be enrolled in THTR 486 while a theatre major. Students must complete five different practicum assignments, with at least one assignment in design, technical, or management areas. With prior approval of the department chair, THTR 493 may be substituted.

Writing Studies Track, English, BA

The Writing Studies Track enables students to design a course of study in the theory and practice of writing in a variety of genres. A student who completes this track will be able to demonstrate skills in the analysis, construction, and presentation of texts; to identify and apply productive, effective, and creative approaches to writing tasks for diverse audiences; and to create a portfolio of writing for use in applying to graduate programs or for professional positions. The Writing Studies Track prepares students for any career that requires professional writing skills.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities-Literature:

ENGL 122 - Introduction to English Studies **Credits: 3**

Mathematics: 3

Liberal Studies Electives: 6

No courses with ENGL prefix

College: 0-8

Foreign Language Intermediate Level (1)

Major: 36

Required Courses:

Literary Survey Courses: 6

Two literary survey courses from the following:

- ENGL 210 - British Literature to 1660 **Credits: 3**
- ENGL 211 - British Literature to 1660-1900 **Credits: 3**
- ENGL 212 - American Literature: Beginnings to 1900 **Credits: 3**
- ENGL 213 - British and American Literature Since 1900 **Credits: 3**
- ENGL 226 - Survey of Global Literature Since 1900 **Credits: 3**

Writing Course: 3

One writing course from the following:

- ENGL 220 - Advanced Composition **Credits: 3**
- ENGL 221 - Creative Writing **Credits: 3**
- ENGL 222 - Technical Writing **Credits: 3**

Language Course: 3

One language course from the following:

- ENGL 208 - Introduction to Film Studies **Credits: 3**
- ENGL 308 - Critical Theory **Credits: 3**
- ENGL 313 - Rhetorical Trends and Traditions **Credits: 3**

Capstone course:

ENGL 484 - Topics in English Studies **Credits: 3**

Controlled Electives:

(2)

Craft and Genre: 6

Two courses from craft and genre:

ENGL 220 - Advanced Composition **Credits: 3**
ENGL 221 - Creative Writing **Credits: 3**
ENGL 222 - Technical Writing **Credits: 3**
ENGL 321 - Persuasive Speech and Writing **Credits: 3**
ENGL 325 - Writing Poetry **Credits: 3**
ENGL 326 - Writing Fiction **Credits: 3**
ENGL 327 - Writing Creative Nonfiction **Credits: 3**
ENGL 422

ENGL 347 - Playwriting **Credits: 3**

or

THTR 347 - Playwriting **Credits: 3**

Forms and Theories: 3

One course from Forms and Theories:

ENGL 308 - Critical Theory **Credits: 3**
ENGL 335 - Literary Nonfiction **Credits: 3**
ENGL 341 - Poetry **Credits: 3**
ENGL 342 - Short Fiction **Credits: 3**
ENGL 343 - Drama **Credits: 3**
ENGL 450 - Film Theory **Credits: 3**

Studio/Portfolio/Career Preparation: 6

Two courses from Studio/Portfolio/Career Preparation:

ENGL 360 - Editing and Publishing **Credits: 3**
ENGL 420 - Writers' Studio **Credits: 3**
ENGL 483 - Honors Thesis **Credits: 1-6**
ENGL 493 - Internship **Credits: 3-12**

ENGL Prefix: 6

Two courses with ENGL prefix except

ENGL 100 - Basic Writing **Credits: 3**
ENGL 121 - Humanities Literature **Credits: 3**
ENGL 122 - Introduction to English Studies **Credits: 3**
ENGL 202 - Composition II **Credits: 3**

Free Electives: 29-38

Total Degree Requirements: 120

(1) Intermediate-level foreign language may be included in Liberal Studies electives.

(2) An internship, aside from counting for up to 6cr toward the major, makes the BA degree recipient much more employable by providing job experience. Students should see the English BA internship director for advice about available openings.

Bachelor of Science

Accounting, BS

Liberal Studies: 47-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 107 - Business Mathematics **Credits: 3**

MATH 108 - Applications of Business Mathematics **Credits: 1**

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

ECON 121 - Principles of Macroeconomics **Credits: 3**

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 6

ECON 122 - Principles of Microeconomics **Credits: 3**

MATH 214 - Probability and Statistics for Business Majors **Credits: 3 (1)**

College: Business Administration Core: 36

Required Courses:

ACCT 201 - Accounting Principles I **Credits: 3**

ACCT 202 - Accounting Principles II **Credits: 3**

BCOM 321 - Business and Interpersonal Communications **Credits: 3**

BLAW 235 - Legal Environment of Business **Credits: 3**

COSC 101 - Computer Literacy **Credits: 3**

or

IFMG 101 - Computer Literacy **Credits: 3**

or

IFMG 110 - Business Spreadsheet Computing **Credits: 3 (2)**

FIN 310 - Fundamentals of Finance **Credits: 3**

IFMG 300 - Information Systems: Theory and Practice **Credits: 3**

MGMT 310 - Principles of Management **Credits: 3**
MGMT 330 - Production and Operations Management **Credits: 3**
MGMT 495 - Business Policy **Credits: 3**
MKTG 320 - Principles of Marketing **Credits: 3**
QBUS 215 - Business Statistics **Credits: 3**

Major: Accounting: 24

(3)

Required Courses:

ACCT 304 - Intermediate Accounting I **Credits: 3**
ACCT 305 - Intermediate Accounting II **Credits: 3**
ACCT 311 - Cost Accounting **Credits: 3**
ACCT 401 - Advanced Accounting **Credits: 3**
ACCT 421 - Federal Tax I **Credits: 3**
ACCT 431 - Auditing **Credits: 3**

Controlled Electives: 6

Any two courses from the following:

ACCT 412 - Advanced Cost Accounting **Credits: 3**
ACCT 422 - Federal Tax II **Credits: 3**
ACCT 432 - Forensic and Internal Auditing **Credits: 3**
ACCT 441 - Accounting for Government and Nonprofit Organizations **Credits: 3**
ACCT 461 - Accounting Systems **Credits: 3**

Free Electives: 12-13

(4,5)

Total Degree Requirements: 120

(1) MATH 214 or MATH 216 or MATH 217.

(2) IFMG 110 cannot be used as a D/F repeat for COSC 101/IFMG 101.

(3) Students must meet the grade prerequisite(s) listed in the course description section of this catalog before advancing to the next course.

(4) Students interested in pursuing the following career paths should consider:

— **Certified Public Accountant (CPA):** ACCT 422, ACCT 441, ACCT 493, and BLAW 336. Students seeking certification as a CPA will be required to satisfy the educational requirement of 150cr.

— **Certified Management Accountant (CMA):** ACCT 412, ACCT 432, ACCT 461, ACCT 493

— **Certified Fraud Examiner (CFE):** ACCT 432, ACCT 493, CRIM 101, ECON 223.

(5) Students may be able to apply these credits in conjunction with the controlled electives to earn a minor in another discipline, such as finance, marketing, economics, and pre-law. Students should follow the advice of their faculty advisor to fulfill the above requirements.

Actuarial Track, Mathematics, BS

The program for a mathematics major in the Kopchick College of Natural Sciences and Mathematics has three options. A student may pursue a degree with a major in mathematics or a degree with a major in mathematics with a concentration in either applied mathematics or actuarial science. Those completing a degree with a major in mathematics will be prepared to continue their studies in mathematics in graduate school, though some may enter business, industry, or government service. Students receiving a mathematics degree with a concentration in applied mathematics will be primarily prepared to enter business, industry, or government service in an area where mathematics or computer science is used, or to continue their studies in applied mathematics or computer science in graduate school. Students in the actuarial science concentration take additional course work in finance and economics, preparing them to complete the first two professional actuarial exams and to pursue employment in the areas of insurance and investment.

(1, 2)

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3**

Social Science:

ECON 121 - Principles of Macroeconomics **Credits: 3**

Liberal Studies Elective: 6

No courses with MATH Prefix, intermediate-level foreign language and ECON 122 are required

Major: 49

Required Courses:

MATH 111 - First-year Seminar **Credits: 1**

MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3**

MATH 171 - Introduction to Linear Algebra **Credits: 3**

MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**

MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits: 3**

MATH 271 - Introduction to Mathematical Proofs I **Credits: 3**

MATH 272 - Introduction to Mathematical Proofs II **Credits: 3**

MATH 341 - Differential Equations **Credits: 3**

MATH 363 - Mathematical Statistics I **Credits: 3**

MATH 364 - Mathematical Statistics II **Credits: 3**

MATH 448 - Introduction to Financial Mathematics **Credits: 3**

MATH 450 - Topics in Applied Computational Mathematics **Credits: 3**

Controlled Electives:

COSC 343 - Introduction to Numerical Methods **Credits: 3**

or

MATH 343 - Introduction to Numerical Methods **Credits: 3**

MATH 416 - Time Series Analysis **Credits: 3**

One Course from the Following:

MATH 371 - Linear Algebra **Credits:** 3
MATH 421 - Advanced Calculus I **Credits:** 3
MATH 423 - Complex Variables **Credits:** 3

One Course from the Following:

MATH 445 - Deterministic Models in Operations Research **Credits:** 3
MATH 446 - Probabilistic Models in Operations Research **Credits:** 3

One Course from the Following:

MATH 480 - Senior Seminar **Credits:** 3
MATH 493 - Internship in Mathematics **Credits:** 3-12 (3)

Other Requirements: 6

ECON 356 - Introduction to Econometrics **Credits:** 3 (4)
FIN 320 - Corporate Finance **Credits:** 3 (4)

Free Electives: 18-19

Total Degree Requirements: 120

- (1) Pass SOA Exam P or Exam FM.
- (2) "B" or higher grades in course work that carries Validation by Educational Experience (VEE) from the Society of Actuaries (required for SOA credential).
- (3) Three credits of internship will be applied to the major. Additional credits may count as free electives.
- (4) FIN 320 and ECON 356 must be passed with grade of "B" or better.

Applied Mathematics Track, Mathematics, BS

The program for a mathematics major in the Kopchick College of Natural Sciences and Mathematics has three options. A student may pursue a degree with a major in mathematics or a degree with a major in mathematics with a concentration in either applied mathematics or actuarial science. Those completing a degree with a major in mathematics will be prepared to continue their studies in mathematics in graduate school, though some may enter business, industry, or government service. Students receiving a mathematics degree with a concentration in applied mathematics will be primarily prepared to enter business, industry, or government service in an area where mathematics or computer science is used, or to continue their studies in applied mathematics or computer science in graduate school. Students in the actuarial science concentration take additional course work in finance and economics, preparing them to complete the first two professional actuarial exams and to pursue employment in the areas of insurance and investment.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits:** 3

Liberal Studies Electives: 6

No courses with MATH prefix, includes intermediate-level foreign language

Major: 43

Required Courses:

MATH 111 - First-year Seminar **Credits: 1**
MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3**
MATH 171 - Introduction to Linear Algebra **Credits: 3**
MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**
MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits: 3**
MATH 271 - Introduction to Mathematical Proofs I **Credits: 3**
MATH 272 - Introduction to Mathematical Proofs II **Credits: 3**
MATH 341 - Differential Equations **Credits: 3**
MATH 363 - Mathematical Statistics I **Credits: 3**
MATH 447 - Modeling and Simulation **Credits: 3**
MATH 450 - Topics in Applied Computational Mathematics **Credits: 3**

Controlled Electives:

(1)

One Course from the Following:

MATH 342 - Advanced Mathematics for Applications **Credits: 4**
MATH 364 - Mathematical Statistics II **Credits: 3**
MATH 445 - Deterministic Models in Operations Research **Credits: 3**
MATH 446 - Probabilistic Models in Operations Research **Credits: 3**

One Course from the Following:

MATH 371 - Linear Algebra **Credits: 3**
MATH 421 - Advanced Calculus I **Credits: 3**
MATH 423 - Complex Variables **Credits: 3**
MATH 427 - Introduction to Topology **Credits: 3**
MATH 476 - Abstract Algebra I **Credits: 3**

One Course from the Following:

MATH 445 - Deterministic Models in Operations Research **Credits: 3**
MATH 446 - Probabilistic Models in Operations Research **Credits: 3**

One Course from the Following:

MATH 480 - Senior Seminar **Credits: 3**
MATH 493 - Internship in Mathematics **Credits: 3-12 (2)**

Other Requirements: 17

Planned program in a complementary field: requires advisor approval and at least 6cr in courses at the 300 level or above. **Credits: 11**

Computer Science:

COSC 110 - Problem Solving and Structured Programming **Credits:** 3

COSC 343 - Introduction to Numerical Methods **Credits:** 3

or

MATH 343 - Introduction to Numerical Methods **Credits:** 3

Free Electives: 13-14

Total Degree Requirements: 120

(1) A student may select courses for a specialized area: Statistics/Actuarial Science: MATH 363, MATH 364, MATH 371, MATH 446
Additionally, a student should minor in applied statistics. Math Analysis/Engineering: MATH 342/MATH 447, MATH 371, MATH 423 Operations
Research: MATH 371, MATH 421, MATH 445/MATH 446, MATH 447

(2) Three credits of internship will be applied to the major. Additional credits may count as free electives.

Applied Physics, Physics, BS

The **BS—Physics/Applied Physics Track** is a practical degree in which the graduates will be trained to work in the semiconductor or electronics industry.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits:** 3

Natural Science:

PHYS 131 - Physics I-C Lecture **Credits:** 3

PHYS 141 - Physics I-C Lab **Credits:** 1

PHYS 132 - Physics II-C Lecture **Credits:** 3

PHYS 142 - Physics II-C Lab **Credits:** 1

Liberal Studies Elective: 3

MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits:** 3

No courses with PHYS prefix

Major: 28

Required Courses:

PHYS 131 - Physics I-C Lecture **Credits:** 3 (1)

PHYS 132 - Physics II-C Lecture **Credits:** 3 (1)

PHYS 141 - Physics I-C Lab **Credits:** 1 (1)

PHYS 142 - Physics II-C Lab **Credits:** 1 (1)
PHYS 331 - Modern Physics **Credits:** 3
PHYS 345 - Optics **Credits:** 3
PHYS 441 - Classical Mechanics **Credits:** 3
PHYS 451 - Electricity and Magnetism **Credits:** 3

Additional Required Courses:

PHYS 231 - Electronics **Credits:** 4
PHYS 342 - Thermal and Statistical Physics **Credits:** 3
PHYS 350 - Intermediate Experimental Physics I **Credits:** 3
PHYS 475 - Physics of Semiconductor Devices I **Credits:** 3

Controlled Electives: 19-21

Select one of the following subfields:

Solid State Electronics: 21

COSC 300 - Computer Organization and Assembly Language **Credits:** 3
MATH 342 - Advanced Mathematics for Applications **Credits:** 4
PHYS 323
PHYS 342 - Thermal and Statistical Physics **Credits:** 3
PHYS 353
PHYS 432
PHYS 475

Computer Science: 21

COSC 300 - Computer Organization and Assembly Language **Credits:** 3
COSC 410 - Computer Architecture **Credits:** 3
COSC 450
MATH 171 - Introduction to Linear Algebra **Credits:** 3
PHYS 342 - Thermal and Statistical Physics **Credits:** 3
PHYS 353
PHYS 432

Chemistry: 19

CHEM 231 - Organic Chemistry I **Credits:** 4
CHEM 325 - Analytical Chemistry I **Credits:** 4
CHEM 341 - Physical Chemistry I **Credits:** 4
CHEM 343 - Physical Chemistry Laboratory I **Credits:** 1
MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits:** 3

Biology: 19

BIOL 201 - Principles of Ecology and Evolution **Credits:** 4
BIOL 202 - Principles of Cell and Molecular Biology **Credits:** 4
CHEM 231 - Organic Chemistry I **Credits:** 4
CHEM 351 - Biochemistry **Credits:** 4

One Course from

BIOL 203 - Principles of Genetics and Development **Credits:** 4
BIOL 250 - Principles of Microbiology **Credits:** 4
BIOL 401 - Laboratory Methods in Biology and Biotechnology **Credits:** 3

Geoscience: 21

GEOS 201 - Foundations of Geology **Credits:** 4
GEOS 202 - Quantitative Methods in the Geoscience **Credits:** 2
GEOS 203 - Surficial Processes **Credits:** 4
GEOS 341 - Planetary Geology **Credits:** 4
GEOS 342 - Stellar Astronomy **Credits:** 4
GEOS 371 - Meteorology **Credits:** 3

Other Requirements: 17-23

CHEM 111 - General Chemistry I **Credits:** 4
CHEM 112 - General Chemistry II **Credits:** 4
COSC 110 - Problem Solving and Structured Programming **Credits:** 3
COSC 343 - Introduction to Numerical Methods **Credits:** 3
MATH 341 - Differential Equations **Credits:** 3

Foreign Language Intermediate Level: 0-6

(2)

Free Electives: 4-12

Total Degree Requirements: 120

(1) Credits are counted in the Liberal Studies natural science requirement.

(2) Six credits of computer programming will substitute for the foreign language requirement: COSC 110, COSC 210, or higher-level computer science courses (COSC 343 recommended), with department permission.

Behavioral and Mental Health Track, Public Health, BS

Kristi Storti, Director

The Bachelor of Science in Public Health graduate will help meet Pennsylvania's workforce needs in public health and health care related fields and will help meet the strong demand for trained public health professionals projected by national and regional studies. This degree will prepare students for jobs in health administration, community health, and health education. Upon completion of the program, students will understand the science of human physical and mental health, the epidemiology of infectious and chronic diseases as well as the complications of the US and global health care systems with regard to access and ethics of the disparities in health care delivery. The program provides students with options to focus in four academic areas: Environmental and Occupational Health, Behavioral and Mental Health, Epidemiology and Biostatistics, and Global and Rural Communities.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities:

PHIL 122 - Contemporary Moral Issues **Credits: 3**
or
PHIL 130 - Introduction to Biomedical Ethics **Credits: 3**

Mathematics:

MATH 217 - Probability and Statistics **Credits: 3**

Natural Science:

BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**
BIOL 119 - Emerging Diseases **Credits: 3**

Social Science:

Choose three courses from:

ANTH 110 - Contemporary Anthropology **Credits: 3**
or
ANTH 211 - Cultural Anthropology **Credits: 3**

GEOG 104 - World Geography: Global Context **Credits: 3**
or
RGPL 103 - Global Cities: Planning and Development **Credits: 3**

PSYC 101 - General Psychology **Credits: 3**
SOC 151 - Principles of Sociology **Credits: 3**
or
SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

Liberal Studies Electives:

ECON 122 - Principles of Microeconomics **Credits: 3**
FDNT 145 - Personal Nutrition **Credits: 3**

Public Health Core: 30-33

BIOL 301 - Fundamentals of Epidemiology **Credits: 3**
ECON 360 - Health Economics **Credits: 3**
GEOG 316 - Introduction to Geographic Information Systems **Credits: 3**
or
RGPL 316 - Introduction to Geographic Information Systems **Credits: 3**
NURS 410 - Health Promotion and Social Issues **Credits: 3**
NURS 455 - Health Care Informatics **Credits: 3**
NURS 314 - Health Policy and Law **Credits: 3**
or
ELR 314 - Health Policy and Law **Credits: 3**
PUBH 122 - Foundations of Public Health **Credits: 3**
PUBH 306 - Research Design and Analysis in Public Health **Credits: 3**
PUBH 493 - Internship in Public Health **Credits: 3-6**
SOC 442 - Medical Sociology **Credits: 3**

Concentration: Behavioral and Mental Health: 18

PSYC 332 - Community Psychology and Prevention Science (CAAST) **Credits: 3**
PSYC 374 - Stress and Coping **Credits: 3**
SOC 361 - Social Stratification **Credits: 3**
or
SOC 362 - Racial and Ethnic Minorities **Credits: 3**
or
SOC 363 - Sociology of Gender **Credits: 3**
SOC 448 - Social Welfare Policy **Credits: 3**
two controlled electives (1)

Free Electives: 22-26

(2)

Total Degree Requirements: 120

(1) See advisor.

(2) Minor or certificate recommended.

Biochemistry, BS

Website: www.iup.edu/biochemistry

The four-year BS biochemistry and the minor are offered by the chemistry department.

The curriculum leading to a BS degree with a major in biochemistry begins with foundation courses in biology, chemistry, mathematics, and physics in the first two years. Specialization in biochemistry commences in the third year with courses in biochemistry, genetics, physical chemistry, special topics in biochemistry, and biochemistry seminar. Completion of one chemistry course as a controlled elective allows students the option to receive a biochemistry degree certified by the American Chemical Society.

A unique feature of this undergraduate program is that biochemistry research is a requirement. After consultation with faculty, the students will define a problem and devise an experimental plan through library research. Laboratory research will be done under the direct supervision of a faculty member. Finally, the student will report on the results of the research in both written and oral forms.

This program is intended for students whose interests lie in a most exciting field of modern science. Graduates can expect to be qualified to enter graduate programs in biochemistry, biology, chemistry, and molecular biology; professional schools in the health sciences; and positions in industrial and government research laboratories and in industrial production facilities.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3**

Natural Science:

PHYS 131 - Physics I-C Lecture **Credits: 3**

PHYS 141 - Physics I-C Lab **Credits: 1**

PHYS 132 - Physics II-C Lecture **Credits: 3**

PHYS 142 - Physics II-C Lab **Credits: 1**

Liberal Studies Elective: 3

MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3**
No courses with BIOC prefix

Major: 52

Required Courses:

BIOC 301 - Foundations of Biochemistry **Credits: 3**
BIOC 402 - Advanced Biochemistry **Credits: 3**
BIOC 311 - Biochemistry Laboratory I **Credits: 1**
BIOC 412 - Advanced Biochemistry Laboratory **Credits: 1**
BIOC 401 - Laboratory Methods in Biology and Biotechnology **Credits: 3**
BIOC 480 - Biochemistry Seminar I **Credits: 1 (1)**
BIOC 481 - Special Topics in Biochemistry **Credits: 1-3**
BIOC 482 - Independent Research in Biochemistry **Credits: 1-3**
BIOC 490 - Biochemistry Seminar II **Credits: 1 (1)**
BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**
BIOL 203 - Principles of Genetics and Development **Credits: 4**
BIOL 250 - Principles of Microbiology **Credits: 4**
CHEM 111 - General Chemistry I **Credits: 4**
or
CHEM 113 - Advanced General Chemistry I **Credits: 4**
CHEM 112 - General Chemistry II **Credits: 4**
or
CHEM 114 - Advanced General Chemistry II **Credits: 4**
CHEM 231 - Organic Chemistry I **Credits: 4**
CHEM 332 - Organic Chemistry II **Credits: 4**
CHEM 325 - Analytical Chemistry I **Credits: 4**
CHEM 341 - Physical Chemistry I **Credits: 4**

Controlled Electives: 6-8

Two courses chosen from any 300- or 400-level BIOC/BIOL/CHEM courses or
CHEM 314 - Inorganic Chemistry **Credits: 4 (2)**
MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**
or
MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits: 3**
or
COSC 110 - Problem Solving and Structured Programming **Credits: 3**

Free Electives: 16-18

Total Degree Requirements: 120

(1) 1cr each semester of senior year.

(2) CHEM 314 must be taken to qualify for an ACS certified degree

Biology, BS

In addition to the bachelor of science degree with no specialization, the department also offers these specialized bachelor of science tracks: Cell and Molecular Biology; Ecology, Conservation, and Evolutionary Biology; Honors Biology; Pre-medical Biology; and Pre-veterinary Biology. Students who pursue the Pre-medical or Pre-veterinary Track must maintain a minimum cumulative GPA of 3.0 after their third semester in the program to continue in that track. All students, including transfer students, must have a cumulative GPA of 3.0 or higher to transfer into the Pre-medical or Pre-veterinary Track after their third semester. For qualified BS Biology Pre-medical track students with a GPA of 3.25 and above, there is an interdisciplinary dual baccalaureate offering. Additionally, students in each track will have the opportunity to apply the free electives credits towards a minor from Biology, such as Animal Behavior, Biomedical Science, Forensic Biosciences, Environmental Microbiology, Neurobiology, Wildlife and Conservation Biology, or others of interest.

Please refer to the section on individual Biology department Minors for their description and curricular requirements. Also please refer to the different Biology degree program and tracks for detailed distribution of credits, curricular requirements, and interdisciplinary opportunities.

Interdisciplinary Dual Baccalaureate: BS Biology/Pre-Medical Track and BS Medical Technology

This dual baccalaureate is an interdisciplinary, collaborative program between two colleges to meet work force demands and provide viable career options to our post baccalaureate students. Dr. Joyce Shanty (Allied Health Professions Programs Coordinator, College of Health and Human Services) will collaborate with Biology faculty and help academically to advise students in the dual baccalaureate program.

The curricular structure in the dual bachelor of science degree in BS Biology/Pre-Medical Track and BS Medical Technology would be a natural fit for students seeking to work as a medical technologist in a clinical, laboratory, or biotechnology setting. This program would also benefit students seeking employment experience prior to medical or graduate school admissions.

Students with a GPA of 3.25 and above enrolled in the BS Medical Technology/BS Biology-Pre-Medical dual degree programs would be eligible to apply for a one year of clinical experience with an affiliated, hospital-based schools of Medical Technology. Areas of instruction will be consistent with requirements of the National Accrediting Agency of Clinical Laboratory Sciences. Following training the students will qualify for the national certification examination. Successful results on this examination will lead to certification as professionally qualified medical technologist/clinical laboratory scientist.

Upon completion of the clinical training at an articulated clinical affiliate, IUP will grant 30 credits that which will be applied to the student's transcript towards their bachelor of science degree in medical technology. Qualified students in this program would have completed a minimum of 150 credits, to receive a dual bachelor of science in biology/pre-medical track and medical technology along with certification to work as a professionally qualified medical technologist.

The bachelor of science degree in biology with no specialization is designed to provide depth in the biological sciences, combined with flexibility in the choice of courses for an interdisciplinary minor. This program allows the student (in consultation with the advisor) to graduate with an interdisciplinary minor and a minor from biology such as animal behavior, environmental Microbiology, forensic biosciences, biomedical science, neurobiology, or wildlife and conservation biology.

Liberal Studies: 45

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**

Natural Science:

CHEM 111 - General Chemistry I **Credits: 4**

CHEM 112 - General Chemistry II **Credits: 4**

Social Science:

one course should also fulfill GMA requirement

Liberal Studies Elective: 3

No courses with BIOL prefix

MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**

or

MATH 217 - Probability and Statistics **Credits: 3**

Major: 36

Required Core Courses:

BIOL 201 - Principles of Ecology and Evolution **Credits: 4**

BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**

BIOL 203 - Principles of Genetics and Development **Credits: 4**

Controlled Biology Electives: 24

Biology electives (major courses only) (1,2)

A minimum of 12cr must be in courses at the 300-400 level.

Biology Concentration: 7-8

CHEM 231 - Organic Chemistry I **Credits: 4**

CHEM 351 - Biochemistry **Credits: 4**

or

BIOC 301 - Foundations of Biochemistry **Credits: 3**

An additional 16-17cr from the following, requires advisor approval (3):

ANTH, BIOL majors' courses only, CAAST, CHEM, CRIM, GEOG, GEOS, FDNT, LGBT&Q, MATH, PHIL, PLSC, PSYC, PUBH, RGPL, SAFE, SOC, SUST, WGS, or other courses of interest.

Other Requirements:

Exit survey for assessment purposes

Free Electives: 15

(4)

Total Degree Requirements: 120

(1) No more than 6cr total from Independent Study, Special Topics, or Internship applies to major; excess applied as free electives.

(2) No more than 4crs can come from 100-level courses. Excluding prerequisite, cognate, liberal studies, college core courses, no more than two majors' courses can be shared between a major and minor.

(3) For BS Biology majors, courses appropriate for a Minor of interest should be selected.

(4) Free Electives will be used toward a Minor such as Animal Behavior, Biomedical Science, Forensic Biosciences, Environmental Microbiology, Neurobiology, Wildlife and Conservation Biology, or other minors of interest.

Cell and Molecular Biology Track, Biology, BS

Students electing the bachelor of science degree with an emphasis in cell and molecular biology take the core biology courses and, in addition, a collection of upper-division courses that focus collectively on important aspects of modern cell and molecular biology. This track will prepare

students for employment in technical positions or for graduate studies in cell biology, molecular biology, biotechnology, or related biomedical disciplines.

Liberal Studies: 44-45

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 105 - College Algebra **Credits:** 3

or

MATH 121 - Calculus I for Natural and Social Sciences **Credits:** 4

Natural Science:

CHEM 111 - General Chemistry I **Credits:** 4

CHEM 112 - General Chemistry II **Credits:** 4

Social Science:

One course should also fulfill GMA requirement

Liberal Studies Elective: 3

MATH 216 - Probability and Statistics for Natural Sciences **Credits:** 3

or

MATH 217 - Probability and Statistics **Credits:** 3

Major: 48

Required Core Courses:

BIOL 201 - Principles of Ecology and Evolution **Credits:** 4

BIOL 202 - Principles of Cell and Molecular Biology **Credits:** 4

BIOL 203 - Principles of Genetics and Development **Credits:** 4

Required Biology Courses:

BIOL 241 - Introductory Medical Microbiology **Credits:** 4

BIOL 331 - Developmental Biology **Credits:** 3

BIOL 405 - The Biology of the Cell - Critical Thinking **Credits:** 2

BIOL 410 - Molecular Biology Topics **Credits:** 3

BIOL 411 - Forensic Biology Laboratory Operations **Credits:** 4

Controlled Biology Electives: 16-17

(1,2)

BIOL 105 - Cell Biology **Credits:** 3

BIOL 117 - Understanding HIV Biology and AIDS **Credits:** 3

BIOL 123 - Perspectives in Cell and Molecular Biology **Credits:** 1

BIOL 200 - Medical Terminology **Credits:** 2
BIOL 281 - Special Topics **Credits:** 1-3 (2)
BIOL 300 - Genetics in Medicine and Nutrition **Credits:** 3
BIOL 301 - Fundamentals of Epidemiology **Credits:** 3
BIOL 310 - Applied Entomology and Zoonoses **Credits:** 3
BIOL 323 - Introduction to Toxicology and Risk Assessment **Credits:** 3
BIOL 352 - Comparative Animal Physiology **Credits:** 3
BIOL 364 - Immunology **Credits:** 3
BIOL 409 - Pharmacology Principles and Applications **Credits:** 3
BIOL 430 - Gene Editing Tools in Medicine and Biotechnology **Credits:** 3
BIOL 462 - Vertebrate Endocrinology **Credits:** 3
BIOL 466 - Principles of Virology **Credits:** 3
BIOL 469 - Circadian Rhythms and Sleep **Credits:** 3
BIOL 477 - Neurobiology **Credits:** 3
BIOL 478 - Mycology and Plant Pathology **Credits:** 3
BIOL 479 - Neurobiology of Addiction **Credits:** 3
BIOL 481 - Special Topics **Credits:** 1-3
BIOL 482 - Independent Study **Credits:** 1-3
BIOL 483 - Honors Thesis/Independent Study **Credits:** 1-6
BIOL 484 - Honors Seminar **Credits:** 2
BIOL 493 - Biology Internship **Credits:** 3-12
or other biology major courses by permission of advisor and department chair

Controlled Electives: 3-4

Any BIOL course at 300 level or above; or
CHEM 351 - Biochemistry **Credits:** 4
or BIOC course

Required Science Courses: 12

CHEM 231 - Organic Chemistry I **Credits:** 4
CHEM 351 - Biochemistry **Credits:** 4
PHYS 111 - Physics I Lecture **Credits:** 3
PHYS 121 - Physics I Lab **Credits:** 1

Other Requirements:

Exit survey for assessment purposes

Free Electives: 15-16

(3)

Total Degree Requirements: 120

(1) No more than 6cr total from Independent Study, Special Topics, or Internship applies to major; excess applied as free electives.

(2) No more than 4cr can come from 100-level courses. Excluding prerequisite, cognate, liberal studies, college core courses, no more than 2 Majors courses can be shared between a major and minor.

(3) Free electives may be used towards a Minor such as Animal Behavior, Biomedical Science, Forensic Biosciences, Environmental Microbiology, Neurobiology, or other minors of interest.

Chemistry, BS

Website: www.iup.edu/chemistry

Chemistry is a field that has historically enjoyed very strong career possibilities. Many students are employed directly after their undergraduate education by the chemical, pharmaceutical or related industries, in jobs that have excellent career prospects. Graduate school in chemistry or biochemistry usually includes very generous financial support, and can lead to outstanding career paths in industry, government or academic areas. These opportunities are available to students completing any of the degree programs offered by the Department of Chemistry, and graduates of these programs have gone on to industrial leadership positions, and some of the most prestigious graduate programs in the country.

The BS degree in Chemistry is designed for students intending a career in chemistry and is certified by the American Chemical Society. The advanced courses in the Chemistry BS reflect trends in the modern field of chemistry, and the requirements are flexible enough to allow students to tailor the degree program to their specific needs and interests. There is also a strong laboratory component in the Chemistry BS, which gives the student excellent hands on preparation for the challenges of employment or graduate school. An internship program with local chemical companies is available, and the credits from this internship can be counted to meet some of the program requirements.

The Chemistry BS degree is designed not only for traditional chemistry majors, but also for those students interested in cross-disciplinary fields that involve chemistry. Students intending to follow a dual-degree program should work with their Chemistry adviser, as courses from their other major can count for some of the requirements in the Chemistry BS degree.

Liberal Studies: 44-46

As outlined in Liberal Studies Requirements section with the following specifications:

Mathematics:

MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3**

Natural Science:

PHYS 111 - Physics I Lecture **Credits: 3**

PHYS 121 - Physics I Lab **Credits: 1**

and

PHYS 112 - Physics II Lecture **Credits: 3**

PHYS 122 - Physics II Lab **Credits: 1**

or

PHYS 131 - Physics I-C Lecture **Credits: 3**

PHYS 141 - Physics I-C Lab **Credits: 1**

and

PHYS 132 - Physics II-C Lecture **Credits: 3**

PHYS 142 - Physics II-C Lab **Credits: 1**

Liberal Studies Elective: 3

MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3**

Major: 55

Required Courses:

CHEM 111 - General Chemistry I **Credits: 4**

or

CHEM 113 - Advanced General Chemistry I **Credits: 4**

CHEM 112 - General Chemistry II **Credits:** 4
or
CHEM 114 - Advanced General Chemistry II **Credits:** 4

CHEM 314 - Inorganic Chemistry **Credits:** 4
CHEM 231 - Organic Chemistry I **Credits:** 4
CHEM 332 - Organic Chemistry II **Credits:** 4
CHEM 290 - Chemistry Seminar I **Credits:** 1
CHEM 325 - Analytical Chemistry I **Credits:** 4
CHEM 326 - Analytical Chemistry II **Credits:** 4
CHEM 341 - Physical Chemistry I **Credits:** 4
CHEM 442 - Advanced Physical Chemistry **Credits:** 3
CHEM 343 - Physical Chemistry Laboratory I **Credits:** 1
CHEM 444 - Advanced Physical Chemistry Laboratory **Credits:** 1
CHEM 390 - Chemistry Seminar II **Credits:** 1
CHEM 401 - Advanced Chemistry Lab **Credits:** 4
CHEM 411 - Advanced Inorganic Chemistry **Credits:** 3
CHEM 490 - Chemistry Seminar III **Credits:** 1
CHEM 498 - Problems in Chemistry **Credits:** 1-2 (2)
BIOC 301 - Foundations of Biochemistry **Credits:** 3

Controlled Electives: 9 (2,3)

At least 9cr additional from CHEM or BIOC at the 400 level

Math elective: 6

Two courses from the following:

MATH 171 - Introduction to Linear Algebra **Credits:** 3
MATH 216 - Probability and Statistics for Natural Sciences **Credits:** 3
MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits:** 3
MATH 341 - Differential Equations **Credits:** 3
MATH 342 - Advanced Mathematics for Applications **Credits:** 4
or
MATH 343 - Introduction to Numerical Methods **Credits:** 3

Other Requirements: 4

BIOL 202 - Principles of Cell and Molecular Biology **Credits:** 4
MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits:** 3

One Course from the Following:

MATH 171 - Introduction to Linear Algebra **Credits:** 3
MATH 216 - Probability and Statistics for Natural Sciences **Credits:** 3
or
MATH 341 - Differential Equations **Credits:** 3

Free Electives: 15-17

Total Degree Requirements: 120

(1) Students are required to complete the DUCK exam during their last semester at IUP.

(2) CHEM 493 Internship in Chemistry may be used to satisfy 3cr of controlled elective or 2cr of CHEM 498.

(3) Additional courses may be counted for this requirement, with permission of advisor and department chair. Students who dual-major may count 400-level courses from their second major for at least some of this requirement.

Community Planning and Development Track, Regional Planning, BS

The mission of the Regional Planning program is to provide opportunities for students, planning professionals, citizens of a diverse regional community to master fundamental and innovative planning principles. The program trains students to become professional planners through a process that emphasizes conceptual knowledge, experiential learning, innovative planning skills, and civic engagement. Students work with colleagues and planners to guide change in a way that will make communities better places to live for present and future generations.

Employment opportunities for planners are excellent. This program has prepared students to work in planning agencies at the federal, state, regional, county, and local levels as well as in the private sector with planning consulting and engineering firms. As planners, they have been trained to work with the public to guide growth and change in metropolitan regions across the country. The two tracks—Environmental Planning and Community Planning and Development—are designed to focus on the knowledge, techniques and strengths of the faculty members, as well as provide students maximum opportunity to be competitive in the planning job market. As part of their course of study, students address and solve real-world problems through class projects and intern with practicing planners who deal with these issues in a professional environment. Planners work with communities to improve the quality of life for people who live there. They take a comprehensive view of issues, listen to all citizen perspectives, endeavor to reconcile controversy, and propose alternatives that can guide community decision making in allocating finite resources to create better places to live.

The Community Planning and Development Track prepares students for employment as professional planners adept at identifying and assessing community development challenges and applying advanced techniques to the development of livable communities. Data collection, spatial information management, and graphic presentation are integral skills taught in the program. Course work also equips students with a conceptual grounding on community development and housing markets theories, spatial data analysis in planning, and site location analysis. Course work includes methods for identifying, modeling, and analyzing the spatial organization of community systems from both practical and theoretical perspectives. Students in regional planning graduate with a working knowledge of land use regulations, and housing need assessment analysis techniques. They are familiar with strategies of economic development and housing markets. They understand both the theory and ethics of planning. Students completing this track should be able to assist diverse communities and organizations in identifying and finding solutions to a wide variety of community development challenges and how transportation planning impacts land use issues.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

MATH 217 - Probability and Statistics **Credits:** 3 recommended

Social Science:

RGPL 103 - Global Cities: Planning and Development **Credits:** 3 required

Liberal Studies Electives: 6

No courses with RGPL prefix

College: 0-8

Foreign Language Intermediate Level (1)

Major: 51

Required Courses in Planning:

RGPL 213 - Cartography and Map Design **Credits: 3**
RGPL 232 - Urban Landscapes **Credits: 3**
RGPL 316 - Introduction to Geographic Information Systems **Credits: 3**
RGPL 350 - Introduction to Community Planning **Credits: 3**
RGPL 352 - Planning Methods **Credits: 3**
RGPL 358 - Planning History and Theory **Credits: 3**
RGPL 412 - Community Planning Practicum **Credits: 3**
RGPL 453 - Planning Design Studio I **Credits: 3**
RGPL 454 - Planning Design Studio II **Credits: 3**
RGPL 458 - Land Use Law **Credits: 3**
RGPL 462 - Planning Policy, Implementation, and Administration **Credits: 3**
RGPL 468 - Planning Theory **Credits: 3**
RGPL 493 - Internship **Credits: 1-12**

Track Courses:

Two Required Courses:

RGPL 404 - Transportation Planning **Credits: 3**
RGPL 470 - Housing and Community Development Policy **Credits: 3**

Select Three Courses from the Following:

GEOG 334 - Political Geography **Credits: 3**
PLSC 354 - Metropolitan Problems **Credits: 3**
RGPL 415 - Introduction to Remote Sensing **Credits: 3**
RGPL 424 - Technical Issues in Geographic Information Systems **Credits: 3**
RGPL 426 - Environmental Land Use Planning **Credits: 3**

Free Electives: 14-23

Total Degree Requirements: 120

As they pass through the program, students will be expected to develop and maintain a portfolio of planning course work as a requirement for graduation.

(1) Intermediate-level foreign language may be included in Liberal Studies electives.

Corporate Finance Track, Finance, BS

The Finance program, leading to a degree of bachelor of science, is designed to educate students who are interested in pursuing one of the many career opportunities within the areas of corporate and personal financial management, banking, insurance, other financial institutions, and investments.

The objective of the Finance program is to provide students with a broad base of knowledge, both theoretical and practical, as well as the analytical and technical skills necessary to build a successful career in an exciting and rapidly changing field.

Liberal Studies: 47-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 107 - Business Mathematics **Credits:** 3
MATH 108 - Applications of Business Mathematics **Credits:** 1

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

ECON 121 - Principles of Macroeconomics **Credits:** 3
PSYC 101 - General Psychology **Credits:** 3

Liberal Studies Electives: 6

ECON 122 - Principles of Microeconomics **Credits:** 3
MATH 214 - Probability and Statistics for Business Majors **Credits:** 3 (1)

College: Business Administration Core: 36

Required Courses:

ACCT 201 - Accounting Principles I **Credits:** 3
ACCT 202 - Accounting Principles II **Credits:** 3
BCOM 321 - Business and Interpersonal Communications **Credits:** 3
BLAW 235 - Legal Environment of Business **Credits:** 3
COSC 101 - Computer Literacy **Credits:** 3
or
IFMG 101 - Computer Literacy **Credits:** 3
or
IFMG 110 - Business Spreadsheet Computing **Credits:** 3 (2)
FIN 310 - Fundamentals of Finance **Credits:** 3
IFMG 300 - Information Systems: Theory and Practice **Credits:** 3
MGMT 310 - Principles of Management **Credits:** 3
MGMT 330 - Production and Operations Management **Credits:** 3
MGMT 495 - Business Policy **Credits:** 3
MKTG 320 - Principles of Marketing **Credits:** 3
QBUS 215 - Business Statistics **Credits:** 3

Major: Corporate Finance Track: 24

Required Courses:

FIN 315 - Financial Analysis Using Electronic Spreadsheets **Credits:** 3
FIN 320 - Corporate Finance **Credits:** 3
FIN 324 - Principles of Investments **Credits:** 3
FIN 360 - Insurance and Risk Management **Credits:** 3
FIN 410 - Financial Institutions and Markets **Credits:** 3

FIN 422 - Seminar in Finance **Credits: 3**
FIN 425 - Financial Derivatives **Credits: 3**

Controlled Electives: 3

One course from the following:

ACCT 305 - Intermediate Accounting II **Credits: 3**
ACCT 421 - Federal Tax I **Credits: 3**
BLAW 336 - Law of Business Organizations **Credits: 3**
ECON 325 - Monetary Economics I **Credits: 3**
ECON 334 - Managerial Economics **Credits: 3**
ECON 345 - International Trade **Credits: 3**
ECON 356 - Introduction to Econometrics **Credits: 3** and
FIN 300 - Personal Finance **Credits: 3**
FIN 365 - Student Managed Investment Portfolio I—Valuation **Credits: 1.5** and
FIN 366 - Student Managed Investment Portfolio II—Performance **Credits: 1.5 (3)**
FIN 420 - Investment Analysis **Credits: 3**
FIN 424 - International Financial Management **Credits: 3**
FIN 481 - Special Topics **Credits: 3**
FIN 493 - Finance Internship **Credits: 3-12**
REAL 382 - Real Estate Fundamentals **Credits: 3**

Free Electives: 12-13

Total Degree Requirements: 120

- (1) MATH 214 or MATH 216 or MATH 217.
- (2) IFMG 110 cannot be used as a D/F repeat for COSC 101/IFMG 101.
- (3) In order for FIN 365 and FIN 366 to count as a controlled elective, you must complete both FIN 365 (1.5cr) and FIN 366 (1.5cr).

Culinary Dietetics Track, Nutrition, BS

Students who complete the Culinary Dietetics Track meet the academic requirements as accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics. The Culinary Dietetics Track allows students to combine academic preparation in nutrition with extensive hand-on learning experiences in culinary arts by one of two routes:

Students who have completed a minimum of 28 credits toward the baccalaureate degree have the opportunity to enroll in the Culinary Arts program at the Punxsutawney Regional Campus, where the three-semester program (fall, spring, summer) will transfer into the Department of Food and Nutrition 32 credits, which apply to the bachelor of science degree. Students complete the culinary arts externship in the summer between the junior and senior years.

Students who earn a culinary certificate before admission to the Dietetics program will receive 32 credits toward the degree.

This track uniquely prepares graduates to incorporate healthy nutrition into classical cuisine, manage food service operations focused on nutrition needs, and integrate culinary arts into hospital, extended care, and school food service operations. Graduates qualify for admission to ACEND-accredited dietetic internships in pursuit of dietetic registration.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Dimensions of Wellness:

One of the following:

NURS 143 - Healthy People—Promoting Wellness **Credits: 3**

FDNT 143 - Current Issues in Nutrition and Wellness **Credits: 3**

Mathematics:

MATH 217 - Probability and Statistics **Credits: 3**

Natural Science:

CHEM 101 - College Chemistry I **Credits: 4**

CHEM 102 - College Chemistry II **Credits: 4**

Social Science:

ANTH 470 - Environmental Archaeology **Credits: 3**

or

PLSC 101 - World Politics **Credits: 3**

or

PLSC 111 - American Government **Credits: 3**

PSYC 101 - General Psychology **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

Liberal Studies Elective: 3

No courses with FDNT prefix (1)

Major: 30

Required Courses:

(2)

FDNT 110 - Careers in Food and Nutrition **Credits: 1**

FDNT 213 - Life Cycle Nutrition **Credits: 3**

FDNT 355 - Medical Nutrition Therapy I **Credits: 3**

FDNT 362 - Experimental Foods **Credits: 3**

FDNT 364 - Methods of Teaching Food and Nutrition **Credits: 3**

FDNT 402 - Community Nutrition **Credits: 3**

FDNT 430 - Professional Topics in Food and Nutrition **Credits: 3**

FDNT 455 - Medical Nutrition Therapy II **Credits: 3**

FDNT 458 - Advanced Human Nutrition **Credits: 4**

FDNT 463 - Nutrition Counseling **Credits: 3**

FDNT 484 - Senior Seminar **Credits: 1**

Other Requirements: 45

Certificate in Culinary Arts **Credits: 32** (1, 3)

Natural Science Sequence: 13

BIOL 241 - Introductory Medical Microbiology **Credits: 4**

or

BIOL 270

BIOL 105 - Cell Biology **Credits: 3**

BIOL 155 - Human Physiology and Anatomy **Credits: 4**

CHEM 255 - Biochemistry for Health Sciences **Credits: 3**

Free Electives: 1

(4)

Total Degree Requirements: 120

(1) The culinary certificate includes a course in computer science (previously transferred as COSC 101), which is considered an additional 3cr toward Liberal Studies requirements, resulting in a total of 44cr in Liberal Studies.

(2) Students who complete their culinary certificate before completing CHEM 101 and CHEM 102 are also required to take FDNT 212.

(3) Completion of a culinary certificate is required for this degree.

(4) Because the culinary certificate includes considerable additional preparation in foods, the 32cr include numerous hours of work that can be considered free electives.

Cyber Security Track, Computer Science, BS

IUP's computer science programs share a curricular core covering fundamental concepts, programming, problem solving, data structures, algorithms, software engineering, database, and seminars on technical topics and the profession. The department focuses on providing a broad foundation to create agile graduates who can adapt to the rapidly changing trends in the computer science and cybersecurity fields. Every student in the B.S. in Cyber Security track also completes a minor in criminology. Based on this program, IUP was awarded recognition as a National Center of Academic Excellence in Information Assurance Education by the National Security Agency and the Department of Homeland Security. Students get hands-on training and opportunities to delve into penetration testing and ethical hacking while completing theoretical and applied upper-level coursework in computer networking, cryptography, and information security. Courses from the Department of Criminology in loss prevention, cybersecurity, and legal aspects enable graduates to coordinate with law enforcement on cyber-crime investigations.

Cybersecurity graduates work in computing and information-related areas of law enforcement, business, industry, and government agencies. Recent graduates have found careers as cyber security analysts, information security analysts and forensic computer analysts, as well as being more traditional programmers for business applications and software developers.

Liberal Studies: 43-44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3 (1)**

Social Science:

CRIM 101 - Crime and Justice Systems **Credits: 3 (2)**

Liberal Studies Elective: 3

MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**
No courses with COSC prefix

Major: 49

Core Courses:

COSC 105 - Fundamentals of Computer Science **Credits: 3**
COSC 110 - Problem Solving and Structured Programming **Credits: 3**
COSC 210 - Object-Oriented and GUI Programming **Credits: 3**
COSC 220 - Applied Computer Programming **Credits: 4**
COSC 300 - Computer Organization and Assembly Language **Credits: 3**
COSC 310 - Data Structures and Algorithms **Credits: 3**
COSC 319 - Software Engineering Concepts **Credits: 3**
COSC 341 - Introduction to Database Management Systems **Credits: 3**
COSC 380 - Seminar on the Computer Profession and Ethics **Credits: 2**
COSC 480 - Seminar on Technical Topics **Credits: 1**

Cyber Security Required Courses:

COSC 216 - Introduction to Cyber Security **Credits: 3**
COSC 345 - Computer Networks **Credits: 3**
COSC 356 - Network Security **Credits: 3**
COSC 473 - Software Engineering Practice **Credits: 3**
or
COSC 493 - Internship in Computer Science **Credits: 6-12 (3)**

Controlled Electives:

6cr from the following: (4, 5)

COSC 362 - Unix Systems **Credits: 3**
COSC 365 - Web Architecture and Application Development **Credits: 3**
IFMG 468 - Information Technology (IT) Security **Credits: 3**

Upper-Level Electives:

3cr from the following: (5, 6)

COSC 410 - Computer Architecture **Credits: 3**
COSC 427 - Introduction to Cryptography **Credits: 3**
COSC 429 - Digital Forensics **Credits: 3**
COSC 430 - Introduction to Systems Programming **Credits: 3**
COSC 432 - Introduction to Operating Systems **Credits: 3**
COSC 454 - Information Assurance Administration **Credits: 3**
COSC 465 - Distributed Processing and Web Services **Credits: 3**
COSC 482 - Independent Study **Credits: 1-4**

Minor in Criminology: 15

(2)

Other Requirements: 3

Additional Mathematics:

MATH 309 - Discrete Mathematics **Credits:** 3

Free Electives: 9-10

Total Degree Requirements: 120

(1) MATH 125 can be substituted by MATH 121.

(2) CRIM 101 (taken as part of the social science requirement) is counted as part of the 18cr Criminology minor. Fifteen additional credits of CRIM are required.

(3) COSC 493 may be selected after completion of sophomore year. Note: If a 6cr COSC 493 is taken, 3cr are applied toward COSC required courses and COSC 473 is required. If a 12 cr COSC 493 is taken, 3cr are applied toward COSC required course and 3cr toward COSC upper-level electives.

(4) Upper-level electives may be counted as controlled electives. 3cr of Intermediate Level foreign language may be applied toward controlled electives.

(5) Controlled and upper-level electives may not be applied toward more than one track in computer science.

(6) No more than 6 credits of overlap can be used for Computer Science majors and Cyber Security minors.

Diagnostic Medical Sonography (Ultrasound) Track, Medical Imaging, BS

The program leading to the bachelor of science degree in Medical Imaging is designed to prepare students for admission into an IUP affiliate institution focused on one of three tracks: Nuclear Medicine Technology, Diagnostic Medical Sonography (Ultrasound), or Echocardiography. This program is a 3+1 whereby the student spends the first three years at IUP taking the required math/science and liberal studies courses and then a year at an affiliate where they earn a certificate in one of the specialty diagnostic imaging programs. All of the coursework at IUP is preparatory towards the final year and the requirements by the Medical Imaging profession. A "C" or better in the following courses is required: MATH 105, CHEM 101, ENGL 101, PHYS 111, BIOL 150, and ENGL 310 or BCOM 321. Acceptance at an affiliate school is contingent upon the student meeting the academic program requirements. At the end of their senior year, upon successful completion of the certificate program at an articulated clinical affiliate accredited within the specific discipline, IUP will grant 32 credits that will be applied to the student's transcript and the bachelor's degree in the Diagnostic Imaging track will be conferred.

Diagnostic Medical Sonography or ultrasound, is a medical specialty in which allied health care professionals, use specialized equipment to create images of structures inside the human body. The process involves placing a small device called a transducer against the patient's skin near the body area to be imaged. A stream of high-frequency sound waves are sent into the body, then are detected as the sound waves bounce off internal structures. Different structures in the body reflect these sound waves differently. The reflected sound waves are analyzed by a computer to make an image of the structure(s) on a monitor or an image that can be recorded on hardcopy. These images created by sonographers help aid physicians in diagnosing and treating medical conditions in the abdomen, breast, heart and blood vessels and, more recently, in diagnosing and treating musculoskeletal problems.

Liberal Studies: 47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 105 - College Algebra **Credits:** 3

Philosophy/Religious Studies:

PHIL 130 - Introduction to Biomedical Ethics **Credits: 3**

Natural Science:

CHEM 101 - College Chemistry I **Credits: 4**

CHEM 102 - College Chemistry II **Credits: 4**

Social Science:

PSYC 101 - General Psychology **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

Liberal Studies Electives: 6

COSC 101 - Computer Literacy **Credits: 3**

or

IFMG 101 - Computer Literacy **Credits: 3**

PHYS 111 - Physics I Lecture **Credits: 3**

no courses with NMDT prefix

Major: 35

Required Courses:

(1)

Articulated courses in track transferred from affiliation agreement.

IMAG 101 - Careers in Medical Imaging **Credits: 1**

IMAG 480 - Medical Imaging Seminar **Credits: 2**

Other Requirements: 23

(2)

BIOL 150 - Human Anatomy **Credits: 4**

BIOL 240 - Human Physiology **Credits: 4**

BIOL 241 - Introductory Medical Microbiology **Credits: 4**

ENGL 310 - Public Speaking **Credits: 3**

or

BCOM 321 - Business and Interpersonal Communications **Credits: 3**

NURS 314 - Health Policy and Law **Credits: 3**

PHYS 112 - Physics II Lecture **Credits: 3**

PHYS 121 - Physics I Lab **Credits: 1**

PHYS 122 - Physics II Lab **Credits: 1**

Free Electives: 15

(3)

Total Requirements: 120

(1) These courses are offered at the University of Findlay/Nuclear Medicine Institute, Findlay, Ohio, and are consistent with requirements of the Joint Review committee on Education in Diagnostic Medical Sonography. The courses are completed during the final 12 months of the degree program.

(2) Students are also required to complete a medical terminology course/ program. Options to fulfill this requirement must be approved by the coordinator of allied health professions.

(3) Two writing-intensive courses are required. Both courses may be from either Liberal Studies or free electives.

Dietetics Track, Nutrition, BS

Students who complete the Dietetics Track (Didactic Program in Dietetics) meet the academic requirements as accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics. This track prepares individuals to translate food and nutrition science information for members of the larger community with respect to healthful food preparation, healthy eating behaviors, medical nutrition therapy, management of nutrition delivery and food service systems, and advocacy for the profession of dietetics. The individual who completes this program will exhibit an in-depth knowledge of food, nutrition, behavioral sciences, and management theory and be able to apply this knowledge to solve problems. Graduates qualify for admission to ACEND-accredited dietetic internships in pursuit of dietetic registration.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Dimensions of Wellness:

Mathematics:

MATH 217 - Probability and Statistics **Credits: 3**

Natural Science:

CHEM 101 - College Chemistry I **Credits: 4**

CHEM 102 - College Chemistry II **Credits: 4**

or

CHEM 111 - General Chemistry I **Credits: 4 (1)**

CHEM 112 - General Chemistry II **Credits: 4 (1)**

Social Science:

ECON 101 - Basic Economics **Credits: 3**

or

ECON 121 - Principles of Macroeconomics **Credits: 3**

PSYC 101 - General Psychology **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

Liberal Studies Elective: 3

No courses with FDNT prefix

Major: 25

Required Courses:

- (1)
- FDNT 110 - Careers in Food and Nutrition **Credits: 1**
 - FDNT 150 - Foods **Credits: 3**
 - FDNT 151 - Foods Laboratory **Credits: 1**
 - FDNT 212 - Nutrition **Credits: 3**
 - FDNT 213 - Life Cycle Nutrition **Credits: 3**
 - FDNT 355 - Medical Nutrition Therapy I **Credits: 3**
 - FDNT 362 - Experimental Foods **Credits: 3**
 - FDNT 458 - Advanced Human Nutrition **Credits: 4**
 - FDNT 470 - Human Food Consumption Patterns **Credits: 3**
 - FDNT 484 - Senior Seminar **Credits: 1**

Controlled Electives: 28

Dietetics Track:

- FDNT 364 - Methods of Teaching Food and Nutrition **Credits: 3**
- FDNT 402 - Community Nutrition **Credits: 3**
- FDNT 430 - Professional Topics in Food and Nutrition **Credits: 3**
- FDNT 455 - Medical Nutrition Therapy II **Credits: 3**
- FDNT 463 - Nutrition Counseling **Credits: 3**
- HOSP 256 - Human Resources in the Hospitality Industry **Credits: 3**
- HOSP 259 - Hospitality Purchasing **Credits: 3**
- HOSP 220 - Food Service Operations **Credits: 3**
- MGMT 310 - Principles of Management **Credits: 3**

Other Requirements: 13

Natural Science Sequence: 13

- BIOL 105 - Cell Biology **Credits: 3**
- BIOL 155 - Human Physiology and Anatomy **Credits: 4**
- BIOL 241 - Introductory Medical Microbiology **Credits: 4**
- CHEM 255 - Biochemistry for Health Sciences **Credits: 3**

Free Electives: 10

Total Degree Requirements: 120

(1) CHEM 231 is also required if CHEM 111-CHEM 112 is taken and is added to major credits.

Disability Services, BS

Completion of this multidisciplinary curriculum in educational, social, and natural sciences prepares graduates to work as professionals serving individuals with disabilities in a wide array of public- and private-sector agencies and service providers, including adult mental health (MH) programs. Students who complete the program will earn a bachelor of science degree and will be prepared for employment as instructional assistants in public or private schools, as therapeutic staff support personnel, or in a wide variety of capacities in MH programs, community-based employment/

living programs, early intervention programs, residential treatment programs, preschool/day care programs, and other agency service providers for individuals with disabilities. Disability Services majors must achieve and maintain a 2.75 overall GPA.

Liberal Studies: 43-44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

Social Science:

PSYC 101 - General Psychology **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

Liberal Studies Elective: 3

CDFR 224 - Marriage and Family Relations **Credits: 3**

Major: 49

Required Courses:

CDFR 218 - Child Development **Credits: 3**

CDFR 310 - Child Observation and Assessment **Credits: 3**

CDFR 315 - Introduction to Early Intervention **Credits: 3**

DISB 440 - Ethical and Professional Behaviors **Credits: 1**

DISB 493 - Internship/Field Training **Credits: 12**

EDEX 111 - Introduction to Exceptional Persons **Credits: 3**

EDEX 340 - Introduction to Behavior Management in Special Education **Credits: 3**

EDEX 415 - Preschool Education for Children with Disabilities **Credits: 3**

EDEX 458 - Transition Assessment and Planning for Youth with Disabilities **Credits: 3**

EDEX 460 - Family Perspectives on Disability **Credits: 3**

EDEX 469 - Education of Persons with Emotional/Behavioral Disorders, Learning Disabilities or Brain Injury **Credits: 3**

EDEX 478 - Education of Persons with Mental Retardation/Developmental Disabilities and Physical/ Multiple Disabilities **Credits: 3**

EDHL 114 - Introduction to Deaf and Hard-of-Hearing Persons **Credits: 3**

EDHL 115 - Introduction to American Sign Language **Credits: 3**

Other Requirements: 6

Professional Sequence:

EDEX 103 - Special Education Technology **Credits: 3**

or

ACE 103 - Digital Instructional Technology **Credits: 3**

EDSP 102 - Educational Psychology **Credits: 3**

Free Electives: 21-22

(1)

Students may use these 18cr toward study of a minor discipline and/or as free electives.

Total Degree Requirements: 120

(1) It is recommended that students pursue minor studies in one of the following: Child Development and Family Relations (18cr), Educational Psychology (18cr), Psychology (18cr), or Sociology/Disability Services or Human Services (18cr).

Echocardiography Track, Medical Imaging, BS

The program leading to the bachelor of science degree in Medical Imaging is designed to prepare students for admission into an IUP affiliate institution focused on one of three tracks: Nuclear Medicine Technology, Diagnostic Medical Sonography (Ultrasound), or Echocardiography. This program is a 3+1 whereby the student spends the first three years at IUP taking the required math/science and liberal studies courses and then a year at an affiliate where they earn a certificate in one of the specialty diagnostic imaging programs. All of the coursework at IUP is preparatory towards the final year and the requirements by the Medical Imaging profession. A "C" or better in the following courses is required: MATH 105, CHEM 101, ENGL 101, PHYS 111, BIOL 150, and ENGL 310 or BCOM 321. Acceptance at an affiliate school is contingent upon the student meeting the academic program requirements. At the end of their senior year, upon successful completion of the certificate program at an articulated clinical affiliate accredited within the specific discipline, IUP will grant 32 credits that will be applied to the student's transcript and the bachelor's degree in the Diagnostic Imaging track will be conferred.

Echocardiography is a medical specialty in which allied health care professionals use specialized equipment to create images of structures inside the human body. These professionals use echocardiogram technology to produce images of the patient's hearts. They create 2-D and 3-D pictures of the heart through the use of high frequency sound waves and special equipment. A transducer is placed against the patient's skin by sending a stream of high frequency sound waves into the body and then detects the sound waves as they bounce off the heart. The reflected sound waves are analyzed by a computer to make an image of the structure(s) on a monitor or images that can be recorded on hard copy. The images created by sonographers help aid physicians in diagnosing and treating numerous disease processes. Sonographers are trusted members of the healthcare team and are relied upon to obtain diagnostic images that will allow physicians to provide the best possible care for their patients. Echocardiography technicians may specialize in adult echocardiography, pediatric echocardiography or fetal echocardiography.

Liberal Studies: 47

As outlined in Liberal Studies Requirements section with the following specifications:

Mathematics:

MATH 105 - College Algebra **Credits: 3**

Natural Science:

CHEM 101 - College Chemistry I **Credits: 4**

CHEM 102 - College Chemistry II **Credits: 4**

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Or

SOC 151 - Principles of Sociology **Credits: 3**

Or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

Liberal Studies Electives: 6

COSC 101 - Computer Literacy **Credits: 3**

Or

IFMG 101 - Computer Literacy **Credits: 3**

PHYS 111 - Physics I Lecture **Credits: 3**

Major: 35

Required Courses:

(1)

Articulated courses in track transferred from affiliation agreement.

IMAG 101 - Careers in Medical Imaging **Credits: 1**

IMAG 480 - Medical Imaging Seminar **Credits: 2**

Other Requirements: 23

(2)

BIOL 150 - Human Anatomy **Credits: 4**

BIOL 240 - Human Physiology **Credits: 4**

BIOL 241 - Introductory Medical Microbiology **Credits: 4**

ENGL 310 - Public Speaking **Credits: 3**

or

BCOM 321 - Business and Interpersonal Communications **Credits: 3**

NURS 314 - Health Policy and Law **Credits: 3**

PHYS 112 - Physics II Lecture **Credits: 3**

PHYS 121 - Physics I Lab **Credits: 1**

PHYS 122 - Physics II Lab **Credits: 1**

Free Electives: 15

(3)

Total Requirements: 120

(1) These courses are offered at the University of Findlay and are consistent with requirement of the Joint Review Committee on Education in Diagnostic Medical Sonography. The courses are completed during the final 12 months of the degree program.

(2) Students are also required to complete a medical terminology course/ program. Options to fulfill this requirement must be approved by the coordinator of allied health professions.

(3) Two writing-intensive courses are required. Both courses may be from either Liberal Studies or free electives.

Philosophy/Religious Studies:

PHIL 130 - Introduction to Biomedical Ethics **Credits: 3**

Philosophy/Religious Studies:

PHIL 130 - Introduction to Biomedical Ethics **Credits: 3**

Ecology, Conservation, and Evolutionary Biology Track, Biology, BS

The Ecology, Conservation, and Evolutionary Biology (ECEB) Track includes all core biology courses and a selection of related courses that focus on ecological and environmental sciences. To achieve an environmental focus, the student must complete broad training in the sciences and mathematics. The track is designed to provide flexibility to allow pursuit of specialized interests within ECEB, including minors in other environmental disciplines (Applied Statistics, Geology, Geography, Regional Planning, and Sustainability). Course requirements for professional certification by the Ecological Society of America (Certified Associate Ecologist) and/or the Wildlife Society (Certified Wildlife Biologist) can be met within this track. This track prepares students for pursuing advanced degrees or employment in areas related to ecology and environmental sciences at universities, government, and private companies.

Liberal Studies: 45

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**

Natural Science:

CHEM 111 - General Chemistry I **Credits: 4**

CHEM 112 - General Chemistry II **Credits: 4**

or

CHEM 113 - Advanced General Chemistry I **Credits: 4**

CHEM 114 - Advanced General Chemistry II **Credits: 4**

Liberal Studies Elective: 3

MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**

or

MATH 217 - Probability and Statistics **Credits: 3**

Major: 42-43

Required Core Courses:

BIOL 201 - Principles of Ecology and Evolution **Credits: 4**

BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**

BIOL 203 - Principles of Genetics and Development **Credits: 4**

Required Biology Courses:

BIOL 205 - Ecological Methods **Credits: 3**

BIOL 210 - Plant Biology **Credits: 3**

BIOL 220 - General Zoology **Credits: 3**

BIOL 272 - Conservation of Plant and Animal Resources **Credits: 3**

BIOL 362 - Ecology **Credits: 3**

BIOL 451 - Evolutionary Biology **Credits: 3**

BIOL 490 - Field Studies in Biology **Credits: 1-4**

or

BIOL 450 - Field Biology at Pymatuning Laboratory of Ecology **Credits: 4**

Controlled Biology Electives: 9

Biology major courses only (1)

Other Science Requirements: 17

GEOS 201 - Foundations of Geology **Credits: 4**

GEOG 316 - Introduction to Geographic Information Systems **Credits: 3**

Controlled Electives: 10

(2)

Select 10cr from the following (cannot include Liberal Studies Elective, or courses counting toward Other Requirements):

A course at the 200 level or higher in addition to specified courses from the following majors:

ANTH;

BIOC;

BIOL;

CHEM;

COSC 110 - Problem Solving and Structured Programming **Credits: 3**

ECON 121 - Principles of Macroeconomics **Credits: 3**

ECON 122 - Principles of Microeconomics **Credits: 3**

ENVE 101 - Introduction to Environmental Engineering **Credits: 3**

GEOG;

GEOS;

MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**

MATH 122 - Calculus II for Natural and Social Sciences **Credits: 4**

MATH 171 - Introduction to Linear Algebra **Credits: 3**

PHYS 111 - Physics I Lecture **Credits: 3**

PHYS 121 - Physics I Lab **Credits: 1**

PSYC;

PUBH 122 - Foundations of Public Health **Credits: 3**

RGPL;

SUST;

Additional courses:

CRIM 374 - Environmental Crime and Justice **Credits: 3**

FDNT 470 - Human Food Consumption Patterns **Credits: 3**

PHIL 270 - Ethics and the Environment **Credits: 3**

PHIL 330 - Philosophy of Science **Credits: 3**

SAFE 310 - Environmental Safety and Health Regulations and Sustainability **Credits: 3**

Free Electives: 15-16

(3,4)

Total Degree Requirements: 120

(1) No more than 6cr total from Independent Study, Special Topics, or Internship applies to major; excess applied as free electives.

(2) Other appropriate BIOL courses at 200-level and above (excluding Liberal Studies courses) in the above departments may be substituted with permission of the advisor and the Biology Department chairperson in advance of taking the course.

(3) Free electives may be used towards a minor or certificate in Geography/Regional Planning, Sustainability, Applied Statistics, Chemistry, Forensic Biosciences, Environmental Microbiology, Foreign Language, or other areas of interest.

(4) Excluding prerequisite, cognate, liberal studies, college core courses, no more than 2 Majors courses can be shared between a major and minor.

Entrepreneurship and Small Business Management Track, Management, BS

Students taking this track will focus on creation and operation of a small business. This track is also for graduates who will be working in small businesses where the manager often must perform several managerial roles and manage several functions.

Liberal Studies: 47-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 107 - Business Mathematics **Credits:** 3

MATH 108 - Applications of Business Mathematics **Credits:** 1

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

ECON 121 - Principles of Macroeconomics **Credits:** 3

PSYC 101 - General Psychology **Credits:** 3

a Global and Multicultural Awareness course (recommended)

Liberal Studies Electives: 6

ECON 122 - Principles of Microeconomics **Credits:** 3

MATH 214 - Probability and Statistics for Business Majors **Credits:** 3 (1)

College: Business Administration Core: 36

Required Courses:

ACCT 201 - Accounting Principles I **Credits:** 3

ACCT 202 - Accounting Principles II **Credits:** 3

BCOM 321 - Business and Interpersonal Communications **Credits:** 3

BLAW 235 - Legal Environment of Business **Credits:** 3

COSC 101 - Computer Literacy **Credits:** 3

or

IFMG 101 - Computer Literacy **Credits:** 3

or

IFMG 110 - Business Spreadsheet Computing **Credits:** 3 (2)

FIN 310 - Fundamentals of Finance **Credits:** 3

IFMG 300 - Information Systems: Theory and Practice **Credits:** 3

MGMT 310 - Principles of Management **Credits:** 3

MGMT 330 - Production and Operations Management **Credits:** 3

MGMT 495 - Business Policy **Credits:** 3

MKTG 320 - Principles of Marketing **Credits:** 3
QBUS 215 - Business Statistics **Credits:** 3

Major: 24

Required Courses:

MGMT 3xx/4xx **Credits:** 3

or

ACCT 311 - Cost Accounting **Credits:** 3

Advanced MGMT elective

or

ACCT 311 - Cost Accounting **Credits:** 3

MGMT 275 - Introduction to Entrepreneurship **Credits:** 3

MGMT 325 - Small Business Management **Credits:** 3

MGMT 403 - Small Business Planning **Credits:** 3

MGMT 492 - Small Business/Entrepreneurship Internship **Credits:** 3-12

Major Area Restricted Electives **Credits:** 6

Free Electives: 13-14

Total Degree Requirements: 120

(1) MATH 214 or MATH 216 or MATH 217.

(2) IFMG 110 cannot be used as a D/F repeat for COSC 101/IFMG 101.

Environmental and Occupational Health Track, Public Health, BS

Kristi Storti, Director

The Bachelor of Science in Public Health graduate will help meet Pennsylvania's workforce needs in public health and health care related fields and will help meet the strong demand for trained public health professionals projected by national and regional studies. This degree will prepare students for jobs in health administration, community health, and health education. Upon completion of the program, students will understand the science of human physical and mental health, the epidemiology of infectious and chronic diseases as well as the complications of the US and global health care systems with regard to access and ethics of the disparities in health care delivery. The program provides students with options to focus in four academic areas: Environmental and Occupational Health, Behavioral and Mental Health, Epidemiology and Biostatistics, and Global and Rural Communities.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities:

PHIL 122 - Contemporary Moral Issues **Credits:** 3

or

PHIL 130 - Introduction to Biomedical Ethics **Credits:** 3

Mathematics:

MATH 217 - Probability and Statistics **Credits:** 3

Natural Science:

BIOL 104 - Human Biology: How the Human Body Works **Credits:** 4

BIOL 119 - Emerging Diseases **Credits:** 3

Social Science:

Choose three courses from:

ANTH 110 - Contemporary Anthropology **Credits:** 3

or

ANTH 211 - Cultural Anthropology **Credits:** 3

GEOG 104 - World Geography: Global Context **Credits:** 3

or

RGPL 103 - Global Cities: Planning and Development **Credits:** 3

PSYC 101 - General Psychology **Credits:** 3

SOC 151 - Principles of Sociology **Credits:** 3

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits:** 3

Liberal Studies Electives:

ECON 122 - Principles of Microeconomics **Credits:** 3

FDNT 145 - Personal Nutrition **Credits:** 3

Public Health Core: 30-33

BIOL 301 - Fundamentals of Epidemiology **Credits:** 3

ECON 360 - Health Economics **Credits:** 3

GEOG 316 - Introduction to Geographic Information Systems **Credits:** 3

or

RGPL 316 - Introduction to Geographic Information Systems **Credits:** 3

NURS 410 - Health Promotion and Social Issues **Credits:** 3

NURS 455 - Health Care Informatics **Credits:** 3

NURS 314 - Health Policy and Law **Credits:** 3

or

ELR 314 - Health Policy and Law **Credits:** 3

PUBH 122 - Foundations of Public Health **Credits:** 3

PUBH 306 - Research Design and Analysis in Public Health **Credits:** 3

PUBH 493 - Internship in Public Health **Credits:** 3-6

SOC 442 - Medical Sociology **Credits:** 3

Concentration: Environmental and Occupational Health: 23

BIOL 221 - Environmental Health and Protection **Credits:** 4

BIOL 323 - Introduction to Toxicology and Risk Assessment **Credits:** 3

CHEM 101 - College Chemistry I **Credits:** 4

CHEM 102 - College Chemistry II **Credits: 4**

SAFE 330 - Recognition, Evaluation, and Control of Occupational Health Hazards I **Credits: 4**

or

SAFE 430 - Recognition, Evaluation, and Control of Occupational Health Hazards II **Credits: 4**

SAFE 335 - Industrial and Environmental Stressors **Credits: 2**

SAFE 361 - Air and Water Pollution **Credits: 2**

Free Electives: 17-21

(1)

Total Degree Requirements: 120

(1) Minor or certificate recommended.

Environmental Engineering, BS

Advisor: Sajad Hamidi, Hau Tang

Environmental Engineering is a multi-disciplinary program that prepares students to work to minimize the impact of human development and technology on the natural world. Their interests include water purification, pollution control, public health, recycling, waste disposal, and sustainable design and manufacturing. Graduates trained in basic sciences and mathematics will use the principles of engineering, geosciences, chemistry, biology, and physics to develop solutions to environmental problems. This degree program combines a solid grounding in college-level basic sciences and mathematics with environmental engineering and technical courses.

Graduates of the BS program in Environmental Engineering will be qualified to enter the workforce immediately or to further their educations in master's or doctoral programs. The degree program will prepare students to apply mathematical and scientific principles to the design, development, and operational evaluation of systems for controlling contained living environments and for monitoring and controlling factors in the external natural environment, including pollution control, waste and hazardous material disposal, health and safety protection, conservation, life support, and requirements for protection of special materials and related work environments.

Graduates of this program will possess the technical expertise required to maintain a healthy balance between societal welfare, economic growth, and the environment surrounding us, and will be in demand in the Pennsylvania workforce where the need for environmental engineers is projected to grow faster than other occupations.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities:

PHIL 122 - Contemporary Moral Issues **Credits: 3**

Mathematics:

MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3**

Natural Science:

CHEM 111 - General Chemistry I **Credits: 4**

CHEM 112 - General Chemistry II **Credits: 4**

or

CHEM 113 - Advanced General Chemistry I **Credits: 4**
CHEM 114 - Advanced General Chemistry II **Credits: 4**

Social Science:

ECON 101 - Basic Economics **Credits: 3**
RGPL 103 - Global Cities: Planning and Development **Credits: 3**
or
GEOG 104 - World Geography: Global Context **Credits: 3**

Liberal Studies Electives: 3

MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3**

Major: 58

Required Courses:

BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**
GEOS 201 - Foundations of Geology **Credits: 4**
MATH 171 - Introduction to Linear Algebra **Credits: 3**
MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**
MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits: 3**
MATH 341 - Differential Equations **Credits: 3**
PHYS 131 - Physics I-C Lecture **Credits: 3**
PHYS 132 - Physics II-C Lecture **Credits: 3**
PHYS 141 - Physics I-C Lab **Credits: 1**
PHYS 142 - Physics II-C Lab **Credits: 1**

Environmental Engineering Core:

ECON 361 - Environmental Economics **Credits: 3**
ENVE 101 - Introduction to Environmental Engineering **Credits: 3**
ENVE 201 - Fluid Mechanics **Credits: 3**
ENVE 211 - Statics and Solid Mechanics **Credits: 3**
ENVE 301 - Environmental Aquatic Chemistry **Credits: 4**
ENVE 311 - Water Resources Engineering **Credits: 4**
ENVE 461 - Water and Wastewater Treatment **Credits: 3**
ENVE 471 - Solid and Hazardous Waste Management **Credits: 3**
ENVE 498 - Environmental Engineering **Credits: 3**
SAFE 435 - Ethics and Professionalism **Credits: 1**

Free Electives: 18

Recommended

BIOL 221 - Environmental Health and Protection **Credits: 4**
BIOL 250 - Principles of Microbiology **Credits: 4**
BIOL 323 - Introduction to Toxicology and Risk Assessment **Credits: 3**
BIOL 401 - Laboratory Methods in Biology and Biotechnology **Credits: 3**
CHEM 231 - Organic Chemistry I **Credits: 4**
CHEM 325 - Analytical Chemistry I **Credits: 4**
CHEM 351 - Biochemistry **Credits: 4**
COSC 110 - Problem Solving and Structured Programming **Credits: 3**

COSC 250
GEOG 316 - Introduction to Geographic Information Systems **Credits:** 3
GEOG 415 - Introduction to Remote Sensing **Credits:** 3
GEOG 419 - Geographic Information Systems (GIS) for Environmental Applications **Credits:** 3
GEOS 312 - Hydrogeology **Credits:** 4
IFMG 110 - Business Spreadsheet Computing **Credits:** 3
IFMG 250 - Business Systems Technology **Credits:** 3
MATH 342 - Advanced Mathematics for Applications **Credits:** 4
SAFE 310 - Environmental Safety and Health Regulations and Sustainability **Credits:** 3
SAFE 361 - Air and Water Pollution **Credits:** 2
Foreign language intermediate sequence **Credits:** 6

Total Degree Requirements: 120

Epidemiology and Biostatistics Track, Public Health, BS

Kristi Storti, Director

The Bachelor of Science in Public Health graduate will help meet Pennsylvania's workforce needs in public health and health care related fields, and will help meet the strong demand for trained public health professionals projected by national and regional studies. This degree will prepare students for jobs in health administration, community health, and health education. Upon completion of the program, students will understand the science of human physical and mental health, the epidemiology of infectious and chronic diseases as well as the complications of the US and global health care systems with regard to access and ethics of the disparities in health care delivery. The program provides students with options to focus in four academic areas: Environmental and Occupational Health, Behavioral and Mental Health, Epidemiology and Biostatistics, and Global and Rural Communities.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities:

PHIL 122 - Contemporary Moral Issues **Credits:** 3
or
PHIL 130 - Introduction to Biomedical Ethics **Credits:** 3

Mathematics:

MATH 121 - Calculus I for Natural and Social Sciences **Credits:** 4

Natural Science:

BIOL 104 - Human Biology: How the Human Body Works **Credits:** 4
BIOL 119 - Emerging Diseases **Credits:** 3

Social Science:

Choose three courses from:

ANTH 110 - Contemporary Anthropology **Credits:** 3
or
ANTH 211 - Cultural Anthropology **Credits:** 3

GEOG 104 - World Geography: Global Context **Credits: 3**

or

RGPL 103 - Global Cities: Planning and Development **Credits: 3**

PSYC 101 - General Psychology **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

Liberal Studies Electives:

ECON 122 - Principles of Microeconomics **Credits: 3**

FDNT 145 - Personal Nutrition **Credits: 3**

Public Health Core: 30-33

BIOL 301 - Fundamentals of Epidemiology **Credits: 3**

ECON 360 - Health Economics **Credits: 3**

GEOG 316 - Introduction to Geographic Information Systems **Credits: 3**

or

RGPL 316 - Introduction to Geographic Information Systems **Credits: 3**

NURS 410 - Health Promotion and Social Issues **Credits: 3**

NURS 455 - Health Care Informatics **Credits: 3**

NURS 314 - Health Policy and Law **Credits: 3**

or

ELR 314 - Health Policy and Law **Credits: 3**

PUBH 122 - Foundations of Public Health **Credits: 3**

PUBH 306 - Research Design and Analysis in Public Health **Credits: 3**

PUBH 493 - Internship in Public Health **Credits: 3-6**

SOC 442 - Medical Sociology **Credits: 3**

Concentration: Epidemiology and Biostatistics: 23

CHEM 101 - College Chemistry I **Credits: 4**

CHEM 102 - College Chemistry II **Credits: 4**

FDNT 422 - Public Health Nutrition and Epidemiology **Credits: 3**

KHSS 472 - Epidemiology of Physical Activity **Credits: 3**

MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**

MATH 411 - Univariate Data Analysis **Credits: 3**

MATH 412 - Multivariate Statistics **Credits: 3**

Free Electives: 17-21

(1)

Total Degree Requirements: 120

(1) Minor or certificate recommended.

Exercise Science Track, Physical Education and Sport, BS

IUP's Exercise Science program is accredited by the Committee on Accreditation for the Exercise Sciences under the auspices of the Commission on Accreditation of Allied Health Education Programs. This program provides students with the knowledge, skills, and abilities to seek employment in

private and commercial fitness clubs, medical fitness facilities, sport-specific and conditioning facilities, and clinical settings such as cardiac and pulmonary rehabilitation programs. This program has an academic core, specialty classes in exercise assessment, programming, and prescription, and opportunities for worksite experience.

While students may select Exercise Science is one of several tracks in the Kinesiology, Health, and Sport Science Department, students must demonstrate above-average academic performance by maintaining programmatic standards including (1) minimum 2.5 cumulative GPA for transfer students outside and within IUP; (2) a minimum of a "C" grade in major/core exercise science classes, including KHSS 221 or BIOL 150, KHSS 285, KHSS 286, KHSS 343, KHSS 347, KHSS 375, KHSS 410, KHSS 411, KHSS 413, KHSS 414, KHSS 415, KHSS 416, KHSS 492, and KHSS 493; and (3) before graduation, successful completion of an NCCA (National Commission for Certifying Agencies) approved health and fitness certification. Student transcripts will be reviewed each semester by the individual academic advisor and reported to the Exercise Science program coordinator for compliance with the academic requirements. Specific work-site experiences may be contingent upon students' obtaining student liability insurance and selected health clearances such as physical, TB, and drug screening. Purchase of small equipment such as stethoscopes and digital heart rate monitors will be required.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 217 - Probability and Statistics **Credits: 3**

Natural Science:

BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**

BIOL 106 - Human Genetics and Health **Credits: 3**

BIOL 116 - Human Genetics and Health Laboratory **Credits: 1**

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 3

FDNT 145 - Personal Nutrition **Credits: 3**

Major: 57-58

Exercise Science Requirements: 50

BIOL 240 - Human Physiology **Credits: 4**

KHSS 146 - Foundations of Exercise Science **Credits: 1**

KHSS 175 - Prevention and Care of Injuries to the Physically Active **Credits: 2**

KHSS 209 - Motor Behavior **Credits: 3**

KHSS 221 - Human Structure and Function **Credits: 3**

or

BIOL 150 - Human Anatomy **Credits: 4**

KHSS 285 - Group/Individual Exercise Leadership **Credits: 3**

KHSS 286 - Personal Training Practicum **Credits: 3**

KHSS 287 - Aquatic Fitness Instruction **Credits: 1**

KHSS 315 - Biomechanics **Credits: 3**

KHSS 343 - Physiology of Exercise **Credits:** 3
KHSS 344 - Adapted Physical Activity and Sport **Credits:** 3
KHSS 347 - Physiology of Exercise Laboratory **Credits:** 1
KHSS 375 - Physiological Basis of Strength Training and Conditioning **Credits:** 3
KHSS 410 - Exercise Prescription **Credits:** 3
KHSS 411 - Physical Fitness Appraisal **Credits:** 3
KHSS 413 - Wellness Coaching for Lifestyle Behavior Management **Credits:** 3

KHSS 414 - Exercise Electrocardiography **Credits:** 3
or
KHSS 416 - Functional Training for Strength and Conditioning **Credits:** 3

KHSS 415 - Lifestyle Behavior Management for Physical Activity **Credits:** 3
KHSS 492 - Senior Capstone in Exercise Science **Credits:** 3
KHSS 493 - Internship **Credits:** 1-12

Controlled Electives: 2-3

BIOL 200 - Medical Terminology **Credits:** 2
KHSS 292 - Introduction to Sport Management **Credits:** 3
KHSS 373 - Business Administration in the Fitness Industry **Credits:** 3
KHSS 436 - Corrective Exercise for the Health and Fitness Practitioner **Credits:** 3
KHSS 493 - Internship **Credits:** 1-12
(addition to 6cr)

Total Degree Requirements: 120

Free Electives: 15-17

Fashion Merchandising, BS

The Fashion Merchandising program provides course emphasis in clothing and human behavior, apparel production and analysis, textiles and quality control, apparel distribution, merchandising and promotion, global diversity, historic textiles and apparel, color and aesthetics, and apparel construction. Communications, problem solving, group project organization, professional presentation, and analytical and critical thinking skills are incorporated in course content. The Eberly College of Business and Information Technology complements this major by providing study in one of three options: business administration, marketing, and small business management. A cooperative program between IUP and the Fashion Institute of Technology in New York City allows students to study either Fashion or Accessories Design.

Graduates of this program are being prepared for entry-level positions such as a manufacturer's sales representative, production assistant, ready-to-wear quality control analyst, textile testing laboratory technician, management trainee leading to position of store manager, executive/merchandising trainee leading toward position of buyer/merchandise manager, museum curator assistant, personal color consultant, fashion entrepreneur, and personalized shopping specialist for an upscale retail firm.

Liberal Studies: 46-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 105 - College Algebra **Credits:** 3
or
MATH 217 - Probability and Statistics **Credits:** 3 (1)

Social Science:

ECON 121 - Principles of Macroeconomics **Credits: 3**
PSYC 101 - General Psychology **Credits: 3**
GEOG 104 - World Geography: Global Context **Credits: 3**
or
ANTH 110 - Contemporary Anthropology **Credits: 3**
or
ANTH 211 - Cultural Anthropology **Credits: 3**

Liberal Studies Electives: 6

COSC 101 - Computer Literacy **Credits: 3**
or
IFMG 101 - Computer Literacy **Credits: 3**
or
IFMG 110 - Business Spreadsheet Computing **Credits: 3**
ECON 122 - Principles of Microeconomics **Credits: 3**
No course with FSMR prefix

Major: 30

Required Courses:

FSMR 112 - Fundamentals of Clothing Construction **Credits: 3**
FSMR 180 - Introduction to Fashion **Credits: 3**
FSMR 215 - Textiles **Credits: 3**
FSMR 280 - Introduction to Apparel Buying **Credits: 3**
FSMR 357 - Global Issues in Textiles and Apparel **Credits: 3**
FSMR 380 - Applications in Apparel Buying **Credits: 3**
FSMR 385 - Ready-to-Wear Analysis **Credits: 3**
FSMR 434 - Quality Control in Textiles **Credits: 3**
FSMR 456 - Historic Costume **Credits: 3**
FSMR 480 - Professional Development in the Fashion Industry **Credits: 3**

Controlled Electives: 9

Three courses from the following:

FSMR 158 - Fashion Show Production **Credits: 3**
FSMR 252 - Aesthetics of Fashion **Credits: 3**
FSMR 258 - Fashion Brand Merchandising **Credits: 3**
FSMR 262 - Fashion Forecasting **Credits: 3**
FSMR 281 - Special Topics **Credits: 1-3**
FSMR 303 - Visual Merchandising **Credits: 3**
FSMR 468 - Supply Chain Management in Textiles and Apparel **Credits: 3**
FSMR 481 - Special Topics **Credits: 1-3**
FSMR 482 - Independent Study **Credits: 1-3**

Additional Requirements: 21-24

Required Courses:

Complete courses in one of the following options:

Option 1: Business Administration Minor: 24

Note: Students must meet all minor requirements listed in catalog.

JRNL 120 - Journalistic Techniques for Professional Writing **Credits: 3**

or

ENGL 310 - Public Speaking **Credits: 3**

Business Administration Minor Requirements (21)

ACCT 201 - Accounting Principles I **Credits: 3**

ACCT 202 - Accounting Principles II **Credits: 3**

FIN 310 - Fundamentals of Finance **Credits: 3**

MGMT 310 - Principles of Management **Credits: 3**

MKTG 320 - Principles of Marketing **Credits: 3**

Two Courses from

BCOM 321 - Business and Interpersonal Communications **Credits: 3**

BLAW 235 - Legal Environment of Business **Credits: 3**

IFMG 300 - Information Systems: Theory and Practice **Credits: 3**

MGMT 330 - Production and Operations Management **Credits: 3 (2)**

Option 2: Marketing

Marketing Track (21)

ACCT 201 - Accounting Principles I **Credits: 3**

JRNL 120 - Journalistic Techniques for Professional Writing **Credits: 3**

or

BCOM 321 - Business and Interpersonal Communications **Credits: 3**

or

ENGL 310 - Public Speaking **Credits: 3**

Marketing Track Requirements (15):

MKTG 320 - Principles of Marketing **Credits: 3**

MKTG 321 - Consumer Behavior **Credits: 3**

Three 3cr 400-level MKTG courses

Marketing Minor (24)

ACCT 201 - Accounting Principles I **Credits: 3**

JRNL 120 - Journalistic Techniques for Professional Writing **Credits: 3**

or

BCOM 321 - Business and Interpersonal Communications **Credits: 3**

or

ENGL 310 - Public Speaking **Credits: 3**

Marketing Minor Requirements (18):

MKTG 320 - Principles of Marketing **Credits: 3**

MKTG 321 - Consumer Behavior **Credits: 3**

Four 3cr 400-level MKTG courses

Option 3: Small Business Management Track: 21

ACCT 201 - Accounting Principles I **Credits: 3**

JRNL 120 - Journalistic Techniques for Professional Writing **Credits: 3**

or

BCOM 321 - Business and Interpersonal Communications **Credits: 3**

or

ENGL 310 - Public Speaking **Credits: 3**

MKTG 320 - Principles of Marketing **Credits: 3**

Small Business Management Requirements:

MGMT 275 - Introduction to Entrepreneurship **Credits: 3**

MGMT 325 - Small Business Management **Credits: 3 (3)**

Two Courses from

MGMT 300 - Human Resource Management **Credits: 3**

MGMT 310 - Principles of Management **Credits: 3**

MGMT 350 - International Business **Credits: 3**

MGMT 403 - Small Business Planning **Credits: 3 (4)**

Free Electives: 9-14

Total Degree Requirements: 120

(1) Student should take MATH 105 (the prerequisite for MATH 115) instead of MATH 217 for their LS requirement if they wish to pursue a double major in a business subject or take MGMT 330 for a Business Administration minor.

(2) Student will need to take MATH 115, MATH 214, and be junior standing to take MGMT 330.

(3) Prerequisites to be waived.

(4) Student will need to take ACCT 202 and 300 in order to take MGMT 403.

Financial Planning Track, Finance, BS

Liberal Studies: 47-48

As outlined in Liberal Studies Requirements section with the following specifications:

Mathematics:

MATH 107 - Business Mathematics **Credits: 3**

and

MATH 108 - Applications of Business Mathematics **Credits: 1**

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

ECON 121 - Principles of Macroeconomics **Credits: 3**

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 6

ECON 122 - Principles of Microeconomics **Credits: 3**

MATH 214 - Probability and Statistics for Business Majors **Credits: 3**

(1)

College: Business Administration Core: 36

ACCT 201 - Accounting Principles I **Credits: 3**

ACCT 202 - Accounting Principles II **Credits: 3**

BCOM 321 - Business and Interpersonal Communications **Credits: 3**

BLAW 235 - Legal Environment of Business **Credits: 3**

COSC 101 - Computer Literacy **Credits: 3**

or

IFMG 101 - Computer Literacy **Credits: 3**

or

IFMG 110 - Business Spreadsheet Computing **Credits: 3**

(2)

FIN 310 - Fundamentals of Finance **Credits: 3**

IFMG 300 - Information Systems: Theory and Practice **Credits: 3**

MGMT 310 - Principles of Management **Credits: 3**

MGMT 330 - Production and Operations Management **Credits: 3**

MGMT 495 - Business Policy **Credits: 3**

MKTG 320 - Principles of Marketing **Credits: 3**

QBUS 215 - Business Statistics **Credits: 3**

Major: Financial Planning Track: 24

ACCT 421 - Federal Tax I **Credits: 3**

FIN 300 - Personal Finance **Credits: 3**

FIN 315 - Financial Analysis Using Electronic Spreadsheets **Credits: 3**

FIN 323 - Retirement Planning **Credits: 3**

FIN 324 - Principles of Investments **Credits: 3**

FIN 360 - Insurance and Risk Management **Credits: 3**

FIN 400 - Estate Planning **Credits: 3**

FIN 426 - Seminar in Financial Planning **Credits: 3**

Free Electives: 12-13

Total Degree Requirements: 120

(1)MATH 214 or MATH 216 or MATH 217.

(2) IFMG 110 cannot be used as a D/F repeat for COSC 101/IFMG 101.

General Management Track, Management, BS

While both management theory and application are taught in all of the department's majors, this track is distinguished by its emphasis on the achievement of organized goals through the efforts of organization members.

Liberal Studies: 47-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 107 - Business Mathematics **Credits:** 3
MATH 108 - Applications of Business Mathematics **Credits:** 1

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

ECON 121 - Principles of Macroeconomics **Credits:** 3
PSYC 101 - General Psychology **Credits:** 3

Liberal Studies Electives: 6

ECON 122 - Principles of Microeconomics **Credits:** 3
MATH 214 - Probability and Statistics for Business Majors **Credits:** 3 (1)

College: Business Administration Core: 36

Required Courses:

ACCT 201 - Accounting Principles I **Credits:** 3
ACCT 202 - Accounting Principles II **Credits:** 3
BCOM 321 - Business and Interpersonal Communications **Credits:** 3
BLAW 235 - Legal Environment of Business **Credits:** 3
COSC 101 - Computer Literacy **Credits:** 3
or
IFMG 101 - Computer Literacy **Credits:** 3
or
IFMG 110 - Business Spreadsheet Computing **Credits:** 3 (2)
FIN 310 - Fundamentals of Finance **Credits:** 3
IFMG 300 - Information Systems: Theory and Practice **Credits:** 3
MGMT 310 - Principles of Management **Credits:** 3
MGMT 330 - Production and Operations Management **Credits:** 3
MGMT 495 - Business Policy **Credits:** 3
MKTG 320 - Principles of Marketing **Credits:** 3
QBUS 215 - Business Statistics **Credits:** 3

Major: 24

Required Courses:

ECON XXX - Any advanced 300-400-level ECON course **Credits: 3**
MGMT 300 - Human Resource Management **Credits: 3**
MGMT 311 - Human Behavior in Organizations **Credits: 3**
MGMT 428 - Seminar in Management **Credits: 3**
MGMT 434 - Industrial Quality: Statistical Tools and Management **Credits: 3**
MGMT 451 - International Management **Credits: 3**
MGMT XXX - Any one MGMT course **Credits: 3**

Controlled Electives: 3

Any advanced business electives from 300-level courses or above. MGMT 493 may be used to meet this requirement. (3)

Free Electives: 12-13

Total Degree Requirements: 120

- (1) MATH 214 or MATH 216 or MATH 217.
- (2) IFMG 110 cannot be used as a D/F repeat for COSC 101/IFMG 101.
- (3) MGMT 275 will be considered an advanced business elective.

Geology, BS

Geology is the broad science that encompasses all aspects of the Earth system. In addition to the solid Earth, this system includes the oceans and atmosphere, climate change, and most aspects of our immediate environment. Professional geologists are thus engaged in a wide range of activities, depending on their interests. Scientific questions addressed by geologists include the evolution of life, the origin of volcanic activity, the assessment of volcanic and earthquake hazards, the evolution of our planetary neighbors, climate change, mineral and energy resources, and the human impact on the environment. The Geoscience Department offers a BS degree that gives students the necessary foundation to pursue a wide variety of career goals. In addition, the department offers a BSEd degree with a major in Earth and Space Science Education (ESPE) for students who are interested in teaching. The degrees and courses in the program emphasize hands-on learning, including outdoor instruction, student-oriented research, and professional experiential learning opportunities. In addition to on-campus instruction and class-related field trips, the department also offers several regional geology field workshops, which take place in Newfoundland, Colorado, Florida, and the American Southwest.

Students complete a set of core foundational geoscience coursework that provides a basis for understanding concepts used for a variety of subdisciplines including oceanography/marine geology, climate change, volcanology, paleontology, astronomy and geophysics. Working closely with academic advisors, students also select a series of coursework tailored specifically to meet individual career goals that include professional teaching certification, research and graduate studies, or working as professional geologists for energy resource companies, environmental consulting firms, or federal and state regulatory agencies.

Liberal Studies: 44-46

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**
or
MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3**

Natural Science:

CHEM 111 - General Chemistry I **Credits: 4**
CHEM 112 - General Chemistry II **Credits: 4**
or
CHEM 113 - Advanced General Chemistry I **Credits: 4**
CHEM 114 - Advanced General Chemistry II **Credits: 4**

Liberal Studies Elective: 3-4

MATH 122 - Calculus II for Natural and Social Sciences **Credits: 4**
or
MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3**

Major: 58

Required Courses:

GEOS 201 - Foundations of Geology **Credits: 4**
GEOS 203 - Surficial Processes **Credits: 4**
GEOS 204 - Historical Geology **Credits: 4**
GEOS 301 - Mineralogy **Credits: 4**
GEOS 302 - Structural Geology **Credits: 4**
GEOS 470 - Research Planning **Credits: 2**
GEOS 475 - Data Interpretation **Credits: 2**
GEOS 480 - Senior Research **Credits: 2**

One Course from the Following: 4

(1)

GEOS 303 - Field Geology **Credits: 4**

GEOS 401 and
GEOS 402

GEOS 403
and
GEOS 404 - Newfoundland Field Workshop **Credits: 3**

GEOS 405 - American Southwest Seminar **Credits: 1**
and
GEOS 406 - American Southwest Field Workshop **Credits: 3**
GEOS 407 - Carbonate Geology Seminar **Credits: 1**
and
GEOS 408 - Carbonate Geology Field Workshop **Credits: 3**

GEOS 490 - Field Studies in Geology **Credits: 1-4**

Ancillary Sciences: 6

Select two courses from the following:

PHYS 111 - Physics I Lecture **Credits: 3**
or
PHYS 131 - Physics I-C Lecture **Credits: 3**
PHYS 112 - Physics II Lecture **Credits: 3**
or

PHYS 132 - Physics II-C Lecture **Credits: 3**
MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**
or
MATH 217 - Probability and Statistics **Credits: 3**

Controlled Electives: 22

Select 22cr from the following: (2)

One 100-level GEOS course (3)
Any 300-level GEOS course(s)
Any 400-level GEOS course(s)

Students interested in pursuing a more generalized career in **Geology** or considering graduate school are encouraged to take three from the following: GEOS 323, GEOS 345, GEOS 352, GEOS 353, GEOS 355, GEOS 362, GEOS 481 (with departmental approval)

Students interested in **Environmental Geosciences** are encouraged to take three from the following: GEOS 310, GEOS 311, GEOS 312, GEOS 323, GEOS 352, GEOS 356, GEOS 481 (with departmental approval)

Students interested in careers in **Energy** are encouraged to take three from the following: GEOS 323, GEOS 324, GEOS 352, GEOS 353, GEOS 355, GEOS 481 (with departmental approval)

Foreign Language Intermediate Level

BIOL 201 - Principles of Ecology and Evolution **Credits: 4**
BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**
BIOL 221 - Environmental Health and Protection **Credits: 4**
CHEM 231 - Organic Chemistry I **Credits: 4**
CHEM 325 - Analytical Chemistry I **Credits: 4**
CHEM 326 - Analytical Chemistry II **Credits: 4**
CHEM 332 - Organic Chemistry II **Credits: 4**
CHEM 341 - Physical Chemistry I **Credits: 4**
COSC 110 - Problem Solving and Structured Programming **Credits: 3**
COSC 210 - Object-Oriented and GUI Programming **Credits: 3**
COSC 310 - Data Structures and Algorithms **Credits: 3**
COSC 341 - Introduction to Database Management Systems **Credits: 3**
COSC 362 - Unix Systems **Credits: 3**

COSC 343 - Introduction to Numerical Methods **Credits: 3**

or

MATH 343 - Introduction to Numerical Methods **Credits: 3**

ENVE 101 - Introduction to Environmental Engineering **Credits: 3**
GEOG 316 - Introduction to Geographic Information Systems **Credits: 3**
GEOG 335
GEOG 341 - Climatology **Credits: 3**
GEOG 343 - Fresh Water Resources **Credits: 3**
GEOG 415 - Introduction to Remote Sensing **Credits: 3**
GEOG 419 - Geographic Information Systems (GIS) for Environmental Applications **Credits: 3**
GEOG 435 - Geography of Energy **Credits: 3**
IFMG 390 - Database Theory and Practice **Credits: 3**

MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**

or

MATH 217 - Probability and Statistics **Credits: 3** (4)

MATH 341 - Differential Equations **Credits: 3**

PHYS 121 - Physics I Lab **Credits: 1**

or

PHYS 141 - Physics I-C Lab **Credits: 1**

PHYS 122 - Physics II Lab **Credits: 1**

or

PHYS 142 - Physics II-C Lab **Credits: 1**

PHYS 342 - Thermal and Statistical Physics **Credits: 3**

Free Electives: 16-18

Total Degree Requirements: 120

(1) Up to 4cr of a summer field camp, internship, field study, or independent study, if approved by the department, may substitute for GEOS 303 or a Geoscience Field Workshop.

(2) No more than 12cr of Controlled Electives may be fulfilled by non-GEOS classes. Only one Geoscience Field Workshop (including prerequisite 1cr Seminar) may be applied toward controlled electives. Six credits of foreign language may count toward controlled electives provided intermediate level is successfully obtained.

(3) When taken before declaring the major or when specially recommended during freshman orientation/transfer advising for students who must take remedial math courses before enrolling in GEOS 201.

(4) Cannot be counted as a controlled elective if MATH 216 is applied toward ancillary science requirements.

Global and Rural Communities Track, Public Health, BS

Kristi Storti, Director

The Bachelor of Science in Public Health graduate will help meet Pennsylvania's workforce needs in public health and health care related fields, and will help meet the strong demand for trained public health professionals projected by national and regional studies. This degree will prepare students for jobs in health administration, community health, and health education. Upon completion of the program, students will understand the science of human physical and mental health, the epidemiology of infectious and chronic diseases as well as the complications of the US and global health care systems with regard to access and ethics of the disparities in health care delivery. The program provides students with options to focus in four academic areas: Environmental and Occupational Health, Behavioral and Mental Health, Epidemiology and Biostatistics, and Global and Rural Communities.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities:

PHIL 122 - Contemporary Moral Issues **Credits: 3**

or

PHIL 130 - Introduction to Biomedical Ethics **Credits: 3**

Mathematics:

MATH 217 - Probability and Statistics **Credits: 3**

Natural Science:

BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**

BIOL 119 - Emerging Diseases **Credits: 3**

Social Science:

ANTH 110 - Contemporary Anthropology **Credits: 3**

or

ANTH 211 - Cultural Anthropology **Credits: 3**

GEOG 104 - World Geography: Global Context **Credits: 3**

or

RGPL 103 - Global Cities: Planning and Development **Credits: 3**

PSYC 101 - General Psychology **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

Liberal Studies Electives:

ECON 122 - Principles of Microeconomics **Credits: 3**

FDNT 145 - Personal Nutrition **Credits: 3**

Public Health Core: 30-33

BIOL 301 - Fundamentals of Epidemiology **Credits: 3**

ECON 360 - Health Economics **Credits: 3**

GEOG 316 - Introduction to Geographic Information Systems **Credits: 3**

or

RGPL 316 - Introduction to Geographic Information Systems **Credits: 3**

NURS 314 - Health Policy and Law **Credits: 3**

or

ELR 314 - Health Policy and Law **Credits: 3**

NURS 410 - Health Promotion and Social Issues **Credits: 3**

NURS 455 - Health Care Informatics **Credits: 3**

PUBH 122 - Foundations of Public Health **Credits: 3**

PUBH 306 - Research Design and Analysis in Public Health **Credits: 3**

PUBH 493 - Internship in Public Health **Credits: 3-6**

SOC 442 - Medical Sociology **Credits: 3**

Concentration: Global and Rural Communities: 21

ANTH 240 - Introduction to Global Health **Credits: 3**

SOC 454 - Dimensions of Rural Public Health **Credits: 3**

ANTH 450 - Health Disparities **Credits: 3**

or

SOC 450 - Health Disparities **Credits: 3**

GEOG 454 - GIS Analysis of Public Health **Credits: 3**

Three controlled electives (1)

Free Electives: 19-23

(2)

Total Degree Requirements: 120

(1) See advisor.

(2) Minor or certificate recommended.

Hospitality Management, BS

Liberal Studies: 43

As outlined in Liberal Studies Requirements section with the following specifications:

Mathematics:

MATH 217 - Probability and Statistics **Credits: 3**

Natural Science:

Option II

Social Science:

(1)

ECON 101 - Basic Economics **Credits: 3**

or

ECON 121 - Principles of Macroeconomics **Credits: 3**

Liberal Studies Elective: 3

No course with HOSP prefix

Major: 57

(1)

Required Courses:

HOSP 101 - Introduction to the Hospitality Industry **Credits: 1**

HOSP 150 - Principles of Hospitality Management **Credits: 3**

HOSP 220 - Food Service Operations **Credits: 3**

HOSP 256 - Human Resources in the Hospitality Industry **Credits: 3**

HOSP 259 - Hospitality Purchasing **Credits: 3**

HOSP 260 - Hotel Operations Management **Credits: 3**

HOSP 265 - Hospitality Cost Management **Credits: 3**

HOSP 310 - Professional Development in the Hospitality Industry **Credits: 3**

HOSP 320 - Hospitality Marketing **Credits: 3**

HOSP 330 - Applications of Food Production and Service **Credits: 4**

HOSP 335 - Legal Issues in Hospitality **Credits: 3**

HOSP 393 - Exploratory Hospitality Field Experience **Credits: 3-12 (3)**

HOSP 413 - Restaurant Food Production and Service **Credits: 4**

HOSP 470 - Hospitality Business Model **Credits: 3**

HOSP 494 - Internship **Credits: 3-12 (3)**

Controlled Electives: 12

One 12cr concentration required: (4)

Hotel and Lodging Concentration:

HOSP 325 - Hotel Sales **Credits: 3**

HOSP 372 - Housekeeping and Facilities Management **Credits: 3**

HOSP 400 - Hotel Revenue Management **Credits: 3**

One course of non-required HOSP prefix requirements **Credits: 3**

Special Events/Tourism Management Concentration

HOSP 235 - Tourism Management **Credits: 3**

HOSP 280 - Special Event Management **Credits: 3**

HOSP 347 - Meeting and Convention Management **Credits: 3**

One course of non-required HOSP prefix requirements **Credits: 3**

Other Requirements: 9-11

ACCT 201 - Accounting Principles I **Credits: 3**

FNLG XXX - Foreign Languages **Credits: 6-8**

Free Electives: 9-11

Total Degree Requirements: 120

- (1) ECON 121 is required for those students completing a Business Minor.
- (2) Department-specified kitchen food preparation uniform, knife kit, and proof of ServSafe certification are required for major lab courses.
- (3) Each student must complete a minimum of 120 hours in each of the two supervised internship experiences (HOSP 393 and HOSP 494). See department internship coordinator for detailed information.
- (4) Each student must complete one 12cr concentration, prior to applying for graduation.

Human Development and Family Science, BS

The Human Development and Family Science program leads to a bachelor of science degree. Primary objectives of the program are to prepare professionals to work in, or supervise, human service agencies that serve children, youth, and/or families. The program also provides preparation for students who want to pursue graduate study in applied programs such as social work, counseling, or education. Students who major in Human Development and Family Science must maintain a 2.0 major GPA to graduate from the program.

The CDFR minor, consisting of 18 credits, is for students who desire to work in programs that entail all aspects of child development and family relationships and administration in human service agencies at federal, state, and local levels, but who have their major coursework in a related field. The INDIANA UNIVERSITY OF PENNSYLVANIA UNDERGRADUATE CATALOG, 2018-19 Page 11 CDFR minor is appropriate for all majors who wish to pursue careers working with children and families. The minor includes two required courses and any combination of four additional courses, including at least one 400-level course, with a CDFR prefix from the list provided.

Liberal Studies: 46-47

As outlined in Liberal Studies Requirements section with the following specifications:

Mathematics: 3

Social Science:

ANTH 110 - Contemporary Anthropology **Credits: 3** or any global or multicultural social science course
PSYC 101 - General Psychology **Credits: 3**
SOC 151 - Principles of Sociology **Credits: 3**
or
SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

Liberal Studies Electives: 6

FCSE 315 - Consumer Economics and Family Finance **Credits: 3**
FDNT 145 - Personal Nutrition **Credits: 3**
No courses with CDFR prefix

Major: 46-47

Required Courses:

CDFR 218 - Child Development **Credits: 3**
CDFR 224 - Marriage and Family Relations **Credits: 3**
CDFR 310 - Child Observation and Assessment **Credits: 3**
CDFR 321 - Preschool Education: Play and Developmentally Appropriate Practices **Credits: 3**
CDFR 323 - Family Issues **Credits: 3**
CDFR 410 - Infant and Toddler Development **Credits: 3**
CDFR 411 - Family and Community **Credits: 3**
CDFR 425 - Adolescence: Risk and Resiliency **Credits: 3**
CDFR 426 - Techniques of Parent Education **Credits: 3**
CDFR 427 - Administration of Human Service Programs **Credits: 3**
CDFR 428 - Family Dynamics **Credits: 3**
CDFR 429 - Teaching in Community Settings **Credits: 3**
One CDFR Elective course **Credits: 3**
SOC 428 - Child Abuse **Credits: 3**

Other Requirements: 3-4

Outside Courses:

NURS 202 - Foundations of Child Health **Credits: 3**
or
BIOL 150 - Human Anatomy **Credits: 4**

Free Electives: 26-28

(1)

Three Optional Concentrations:

Early Intervention 18

CDFR 315 - Introduction to Early Intervention **Credits: 3**
EDEX 111 - Introduction to Exceptional Persons **Credits: 3**

EDEX 415 - Preschool Education for Children with Disabilities **Credits: 3**
EDEX 460 - Family Perspectives on Disability **Credits: 3**
KHSS 209 - Motor Behavior **Credits: 3**
KHSS 370 - Adapted Health and Physical Education **Credits: 3**

Infant/Toddler Mental Health 15

CDFR 315 - Introduction to Early Intervention **Credits: 3**
CDFR 420 - Infant Toddler Mental Health **Credits: 3 (2)**
CDFR 430 - Poverty and Human Development **Credits: 3**
EDEX 111 - Introduction to Exceptional Persons **Credits: 3**
EDEX 460 - Family Perspectives on Disability **Credits: 3**

Youth and Families 15

CDFR 430 - Poverty and Human Development **Credits: 3**
or
CDFR 481 - Special Topics **Credits: 1-3**
EDEX 460 - Family Perspectives on Disability **Credits: 3**
FCSE 350 - Teaching Family Life Education **Credits: 3**
KHSS 417 - Contemporary Issues in School and Community Health **Credits: 3**
PSYC 312 - Adult Development and Aging **Credits: 3**

Total Degree Requirements: 120

(1) Students are encouraged to declare a minor **or** complete one of three concentrations or fulfill the requirements for National Council for Family Relations Certificate Family Life Educator certificate. An internship can be completed with any one of the above options.

(2) CDFR 420 can count as either a core course or as part of the concentration, but not in both places.

Human Resource Management, BS

The bachelor of science degree program in human resource management prepares individuals in both the theoretical and applied aspects of managing the human resources function in organizations as a generalist or specialist. Students will gain expertise in areas such as job design, staffing, training, compensation, and performance appraisal.

Liberal Studies: 47-48

As outlined in Liberal Studies Requirements section with the following specifications:

Mathematics:

MATH 107 - Business Mathematics **Credits: 3**
MATH 108 - Applications of Business Mathematics **Credits: 1**

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

ECON 121 - Principles of Macroeconomics **Credits: 3**
PSYC 101 - General Psychology **Credits: 3**
a Global and Multicultural Awareness course (recommended)

Liberal Studies Electives: 6

ECON 122 - Principles of Microeconomics **Credits: 3**
MATH 214 - Probability and Statistics for Business Majors **Credits: 3 (1)**

College: Business Administration Core: 36

Required Courses:

ACCT 201 - Accounting Principles I **Credits: 3**
ACCT 202 - Accounting Principles II **Credits: 3**
BCOM 321 - Business and Interpersonal Communications **Credits: 3**
BLAW 235 - Legal Environment of Business **Credits: 3**
COSC 101 - Computer Literacy **Credits: 3**
or
IFMG 101 - Computer Literacy **Credits: 3**
or
IFMG 110 - Business Spreadsheet Computing **Credits: 3 (2)**
FIN 310 - Fundamentals of Finance **Credits: 3**
IFMG 300 - Information Systems: Theory and Practice **Credits: 3**
MGMT 310 - Principles of Management **Credits: 3**
MGMT 330 - Production and Operations Management **Credits: 3**
MGMT 495 - Business Policy **Credits: 3**
MKTG 320 - Principles of Marketing **Credits: 3**
QBUS 215 - Business Statistics **Credits: 3**

Major: Human Resource Management: 24

Required Courses:

ECON 330 - Labor Economics **Credits: 3**
MGMT 300 - Human Resource Management **Credits: 3**
MGMT 400 - Compensation Management **Credits: 3**
MGMT 401 - Management Development and Training **Credits: 3**
MGMT 402 - Seminar in Human Resource Management **Credits: 3**
or
MGMT 428 - Seminar in Management **Credits: 3**
MGMT 405 - Organizational Staffing **Credits: 3**

Controlled Electives: 6

Two courses from the following:

ACCT 300
BCOM 342 - Intercultural Business Communication **Credits: 3**
ELR 480 - Introduction to Negotiations and Conflict Resolution **Credits: 3**
MGMT 311 - Human Behavior in Organizations **Credits: 3**
MGMT 406
MGMT 434 - Industrial Quality: Statistical Tools and Management **Credits: 3**
MGMT 451 - International Management **Credits: 3**
MGMT 452 - Comparative Management **Credits: 3**

MGMT 493 - Management Internship **Credits:** 3-12
PSYC 390 - Industrial-Organizational Psychology **Credits:** 3
PSYC 411 - Psychology of Women **Credits:** 3
SAFE 101 - Introduction to Occupational Safety and Health **Credits:** 3
SOC 340
SOC 348 - Sociology of Work **Credits:** 3
SOC 362 - Racial and Ethnic Minorities **Credits:** 3

Free Electives: 12-13

Total Degree Requirements: 120

(1) MATH 214 or MATH 216 or MATH 217.

(2) IFMG 110 cannot be used as a D/F repeat for COSC 101/IFMG 101.

Information Systems Track, Management Information Systems, BS

The Information Systems Track prepares students for careers in computer-based information systems in organizational environments. Integrates areas such as networking, cybersecurity, and user/manager involvement in the global business environment with the traditional skills of programming, analysis and design, database development, architecture designs, and application development. Project management, Internet of Things (IoT), and client server applications are included, as well as an emphasis on business computing issues such as profitability, budgeting, collaboration, and front end/back end system processing.

Liberal Studies: 47-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 107 - Business Mathematics **Credits:** 3
MATH 108 - Applications of Business Mathematics **Credits:** 1

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

ECON 121 - Principles of Macroeconomics **Credits:** 3
PSYC 101 - General Psychology **Credits:** 3

Liberal Studies Electives: 6

ECON 122 - Principles of Microeconomics **Credits:** 3
MATH 214 - Probability and Statistics for Business Majors **Credits:** 3 (1)
No courses with IFMG prefix

College: Business Administration Core: 36

Required Courses:

ACCT 201 - Accounting Principles I **Credits: 3**
ACCT 202 - Accounting Principles II **Credits: 3**
BCOM 321 - Business and Interpersonal Communications **Credits: 3**
BLAW 235 - Legal Environment of Business **Credits: 3**
COSC 101 - Computer Literacy **Credits: 3**
or
IFMG 101 - Computer Literacy **Credits: 3**
or
IFMG 110 - Business Spreadsheet Computing **Credits: 3 (2)**
FIN 310 - Fundamentals of Finance **Credits: 3**
IFMG 300 - Information Systems: Theory and Practice **Credits: 3**
MGMT 310 - Principles of Management **Credits: 3**
MGMT 330 - Production and Operations Management **Credits: 3**
MGMT 495 - Business Policy **Credits: 3**
MKTG 320 - Principles of Marketing **Credits: 3**
QBUS 215 - Business Statistics **Credits: 3**

Major: Information Systems Track: 21

Required Courses:

IFMG 210 - Introduction to Front-End Business Applications **Credits: 3**
IFMG 230 - Introduction to Back-End Business Applications **Credits: 3**
IFMG 250 - Business Systems Technology **Credits: 3**
IFMG 352 - LAN Design and Installation **Credits: 3**
IFMG 390 - Database Theory and Practice **Credits: 3**
IFMG 460 - Analysis and Logical Design **Credits: 3**
IFMG 475 - Project Management and Implementation **Credits: 3**

Controlled Electives: 3

(3)

One course from the following:

CRIM 321 - Cybersecurity and Loss Prevention **Credits: 3**
or
CRIM 323 - Cybersecurity and the Law **Credits: 3**
or
any course with prefix COSC or IFMG numbered 300 and above (except IFMG 300)
or
QBUS 300 and above

Free Electives: 12-13

Total Degree Requirements: 120

- (1) MATH 214 or MATH 216 or MATH 217.
- (2) IFMG 110 cannot be used as a D/F repeat for COSC 101/IFMG 101.
- (3) A student may choose to fulfill the requirements through an internship.

Information Technology Track, Management Information Systems, BS

The Information Technology (IT) Track of the management information systems (MIS) program provides graduates with the skills and knowledge to take on appropriate professional positions in the IT field upon graduation. It aims also at providing skills for graduates to grow into leadership positions and/or pursue research or graduate studies in the field. The IT field is a vibrant field that emerged as a result of the rapid advances in the technology field and the need for organizations to adjust quickly to these advances. IT Track graduates should be the first to take the lead to fill the computing needs of organizations. The IT Track encompasses courses in the latest technological advances, thus enabling graduating students to take the lead in this vibrant field.

Liberal Studies: 47-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 107 - Business Mathematics **Credits:** 3

MATH 108 - Applications of Business Mathematics **Credits:** 1

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

ECON 121 - Principles of Macroeconomics **Credits:** 3

PSYC 101 - General Psychology **Credits:** 3

Liberal Studies Electives: 6

ECON 122 - Principles of Microeconomics **Credits:** 3

MATH 214 - Probability and Statistics for Business Majors **Credits:** 3 (1)

College: Business Administration Core: 36

Required Courses:

ACCT 201 - Accounting Principles I **Credits:** 3

ACCT 202 - Accounting Principles II **Credits:** 3

BCOM 321 - Business and Interpersonal Communications **Credits:** 3

BLAW 235 - Legal Environment of Business **Credits:** 3

COSC 101 - Computer Literacy **Credits:** 3

or

IFMG 101 - Computer Literacy **Credits:** 3

or

IFMG 110 - Business Spreadsheet Computing **Credits:** 3 (2)

FIN 310 - Fundamentals of Finance **Credits:** 3

IFMG 300 - Information Systems: Theory and Practice **Credits:** 3

MGMT 310 - Principles of Management **Credits:** 3

MGMT 330 - Production and Operations Management **Credits:** 3

MGMT 495 - Business Policy **Credits:** 3

MKTG 320 - Principles of Marketing **Credits:** 3

Major: Information Technology Track: 21

Required Courses:

IFMG 210 - Introduction to Front-End Business Applications **Credits: 3**

or

IFMG 230 - Introduction to Back-End Business Applications **Credits: 3**

IFMG 250 - Business Systems Technology **Credits: 3**

IFMG 254 - Computer Technology Virtualization **Credits: 3**

IFMG 352 - LAN Design and Installation **Credits: 3**

IFMG 360 - Information Storage and Management **Credits: 3**

IFMG 390 - Database Theory and Practice **Credits: 3**

IFMG 471 - Data Center and Cloud Computing **Credits: 3**

Controlled Electives: 3

(3) One courses from the following:

CRIM 321 - Cybersecurity and Loss Prevention **Credits: 3**

or

CRIM 323 - Cybersecurity and the Law **Credits: 3**

or

any course with prefix COSC or IFMG numbered 300 or above (except IFMG 300)

or

QBUS 300 or above

Free Electives: 12-13

Total Degree Requirements: 120

(1) MATH 214 or MATH 216 or MATH 217.

(2) IFMG 110 cannot be used as a D/F repeat for COSC 101/IFMG 101.

(3) A student may choose to fulfill the requirements through an internship.

Interior Design, BS

The Interior Design program offers students opportunities in analyzing problems, synthesizing information, and implementing design solutions supportive of the needs of people and the environment. The program emphasizes creative problem solving through interdisciplinary experiences and communicating solutions. It enables graduates to adapt to a changing world by drawing on history while applying the principles of informed design and research. This program is accredited by the National Association of Schools of Art and Design.

The core of the program includes courses addressing space planning, hand drafting, design graphics and presentation techniques, color theory, building systems, materials and finishes, human factors, computer-aided drafting techniques, history of design, 3-D design, textiles, lighting, residential and commercial design, and professional practice. Detailed information is available from instructors regarding equipment and supplies to be purchased by students for individual courses in this program. Internships present an excellent opportunity for students to gain practical, on-the-job training and are highly recommended. Experiential learning opportunities in the community augment the program. Students tour a variety of settings including offices, museums, factories, showrooms, retail outlets, and construction sites. Supportive courses are offered in art, theater, communications media, and business. Graduates are prepared for entry-level positions in commercial and residential design, sales, historical preservation, kitchen and bath design, and showroom management.

Liberal Studies: 46-48

As outlined in the Liberal Studies Requirements with the following specifications:

Fine Arts:

ARHI 205 - Ancient to Medieval Art **Credits: 3** recommended

Mathematics:

MATH 101 - Foundations of Mathematics **Credits: 3** or higher

Natural Science:

Option I or Option II

Option I:

SCI 105 - Physical Science I **Credits: 4**

SCI 107 - Chemistry for Everyone **Credits: 3**

and

SCI 117 - Chemistry for Everyone Laboratory **Credits: 1**

Option II:

SCI 105 - Physical Science I **Credits: 4**

SCI 107 - Chemistry for Everyone **Credits: 3**

Social Science:

PSYC 101 - General Psychology **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

Global and Multicultural Awareness course

Liberal Studies Electives: 6

ARHI 207 - Renaissance through Modern Art **Credits: 3**

ECON 122 - Principles of Microeconomics **Credits: 3**

No courses with INDS prefix

Major: 54

Required Courses:

INDS 105 - Introduction to Interior Design **Credits: 3**

INDS 110 - Color and Light **Credits: 3**

INDS 118 - Interior Design Graphics **Credits: 3**

INDS 210 - Human Factors in Interior Design **Credits: 3**

INDS 218 - Computer Technology for Interior Design **Credits: 3**

INDS 219 - Kitchen and Bath Design **Credits: 3**
INDS 230 - Presentation for Interior Design **Credits: 3**
INDS 240 - Three-Dimensional Design for Interior Design **Credits: 3**
INDS 313 - Building Systems I: Materials and Finishes **Credits: 3**
INDS 315 - Residential Design Studio **Credits: 3**
INDS 323 - Building Systems II: Mechanicals **Credits: 3**
INDS 370 - History of Interior Design and Architecture I **Credits: 3**
INDS 380 - History of Interior Design and Architecture II **Credits: 3**
INDS 405 - Interior Design Professional Practice **Credits: 3**
INDS 460 - Portfolio **Credits: 3**
INDS 464 - Commercial Design Studio I **Credits: 3**
INDS 465 - Commercial Design Studio II **Credits: 3**
INDS 470 - Interior Design Capstone **Credits: 3**

Other Requirements: 15

Outside Concentration:

Business: 6

BCOM 321 - Business and Interpersonal Communications **Credits: 3**
MKTG 320 - Principles of Marketing **Credits: 3**

Art: 9

ART 114 - Color and Two-Dimensional Design **Credits: 3**

Two Courses from the Following:

ART 213 - Woodworking: Function and Form **Credits: 3**
ART 214 - Ceramics **Credits: 3**
ART 215 - Sculpture **Credits: 3**
ART 216 - Jewelry and Metals **Credits: 3**
ART 218 - Introduction to Graphic Design **Credits: 3**
COMM 271 - Beginning Photography **Credits: 3**
COMM 371 - Advanced Photography **Credits: 3**
COMM 471 - Advanced Image Editing **Credits: 3**
THTR 116 - Fundamentals of Theatrical Design **Credits: 3**
THTR 120 - Stagecraft **Credits: 3**
THTR 221 - Basic Stage Lighting **Credits: 3**
THTR 320 - Scene Design **Credits: 3**
THTR 321 - Stage Lighting Design **Credits: 3**
THTR 489 - Design/Technology/Management Studio **Credits: 3**

Free Electives: 3-5

(1)

Total Degree Requirements: 120

(1) Students are encouraged to complete an internship.

International Business, BS

The bachelor of science degree program in international business offers students an opportunity to acquire a thorough understanding of managing global operations in the contemporary business environment. In addition, students develop skills in a traditional functional area (finance, human resources, marketing). The combination of these two objectives enables students to successfully perform in today's competitive global economy.

Liberal Studies: 47-48

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities:

PHIL 122 - Contemporary Moral Issues **Credits: 3**

Mathematics:

MATH 107 - Business Mathematics **Credits: 3**

MATH 108 - Applications of Business Mathematics **Credits: 1**

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

ECON 121 - Principles of Macroeconomics **Credits: 3**

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 6

ECON 122 - Principles of Microeconomics **Credits: 3**

MATH 214 - Probability and Statistics for Business Majors **Credits: 3 (1)**

No courses with MGMT prefix

College: Business Administration Core: 36

Required Courses:

ACCT 201 - Accounting Principles I **Credits: 3**

ACCT 202 - Accounting Principles II **Credits: 3**

BCOM 321 - Business and Interpersonal Communications **Credits: 3**

BLAW 235 - Legal Environment of Business **Credits: 3**

COSC 101 - Computer Literacy **Credits: 3**

or

IFMG 101 - Computer Literacy **Credits: 3**

or

IFMG 110 - Business Spreadsheet Computing **Credits: 3 (2)**

FIN 310 - Fundamentals of Finance **Credits: 3**

IFMG 300 - Information Systems: Theory and Practice **Credits: 3**

MGMT 310 - Principles of Management **Credits: 3**

MGMT 330 - Production and Operations Management **Credits: 3**
MGMT 495 - Business Policy **Credits: 3**
MKTG 320 - Principles of Marketing **Credits: 3**
QBUS 215 - Business Statistics **Credits: 3**

Foreign Language Requirement: 0-9

(3)

Foreign Residency Requirement

(4)

Major: International Business: 21

Required Courses:

ECON 345 - International Trade **Credits: 3**
MGMT 350 - International Business **Credits: 3**
or
MKTG 350 - International Business **Credits: 3**
MGMT 454 - International Competitiveness **Credits: 3**
MGMT 459 - Seminar in International Management **Credits: 3**

Concentration Area Courses: 9

(select one concentration; choose three of the four courses in the chosen area)

Finance Concentration:

FIN 320 - Corporate Finance **Credits: 3**
FIN 324 - Principles of Investments **Credits: 3**
FIN 410 - Financial Institutions and Markets **Credits: 3**
FIN 424 - International Financial Management **Credits: 3**

Human Resources Management Concentration:

MGMT 300 - Human Resource Management **Credits: 3**
MGMT 400 - Compensation Management **Credits: 3**
MGMT 402 - Seminar in Human Resource Management **Credits: 3**
MGMT 452 - Comparative Management **Credits: 3**

Marketing Concentration:

MKTG 321 - Consumer Behavior **Credits: 3**
MKTG 420 - Marketing Management **Credits: 3**
MKTG 421 - Marketing Research **Credits: 3**
MKTG 430 - International Marketing **Credits: 3**

Free Electives: 12-13

Total Degree Requirements: 120

(1) MATH 214 or MATH 216 or MATH 217.

(2) IFMG 110 cannot be used as a D/F repeat for COSC 101/IFMG 101.

(3) Candidates must demonstrate a conversational proficiency in a foreign language. This requirement may be met by (a) successful completion of 9 intermediate-level credits in a specific language, or (b) successful completion of an exemption or credit examination in lieu of the above. A foreign student, registered as such at IUP, whose acquired native language is other than English and who demonstrates an acceptable proficiency in English, can meet the foreign language requirement by successful completion of an exemption examination in the acquired native language.

(4) Candidates must document one semester of foreign residence (minimum of three months). Normally, the foreign residency requirement will be met in conjunction with a work experience, internship, or student exchange. A substitute cross-cultural experience may be permitted with the academic advisor's recommendation. The foreign language requirement is a prerequisite to the foreign residency requirement.

Languages and Systems Track, Computer Science, BS

IUP's computer science programs share a curricular core covering fundamental concepts, programming, problem solving, data structures, algorithms, software engineering, database, and seminars on technical topics and the profession. The department focuses on providing a broad foundation to create agile graduates who can adapt to the rapidly changing trends in the computer science field. Every student in the B.S. in Languages and Systems track also completes a minor in mathematics. This program is accredited by ABET, the nationwide board for accreditation of computing, engineering technology, and applied and natural science programs. Courses held in computer classrooms offer hands-on learning that blends theory with supervised practice to train work-force ready graduates. Selected theoretical and applied upper-level courses reflect the technical nature of this track and provide students with in-depth skills to analyze complex problems, to identify interdisciplinary solutions, and to manage software implementations.

Graduates leverage the widely recognized ABET credential when entering the workforce or applying to graduate programs. Many of the Languages and Systems track students continue with graduate school or work in analytical and computer-dependent areas of business, government, and industry. Recent graduates have started their careers with positions in systems analysis, programming or business applications, software development, scientific and applied mathematical programming, and other computer-related areas.

Liberal Studies: 43-44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits:** 3 (1)

Natural Science: Option I

See requirements for **Natural Science: Option I** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Liberal Studies Elective: 3

MATH 216 - Probability and Statistics for Natural Sciences **Credits:** 3 (6)
no course with COSC prefix

Major: 48

Core Courses:

COSC 105 - Fundamentals of Computer Science **Credits:** 3
COSC 110 - Problem Solving and Structured Programming **Credits:** 3
COSC 210 - Object-Oriented and GUI Programming **Credits:** 3
COSC 300 - Computer Organization and Assembly Language **Credits:** 3
COSC 310 - Data Structures and Algorithms **Credits:** 3
COSC 319 - Software Engineering Concepts **Credits:** 3
COSC 341 - Introduction to Database Management Systems **Credits:** 3
COSC 380 - Seminar on the Computer Profession and Ethics **Credits:** 2
COSC 480 - Seminar on Technical Topics **Credits:** 1

Languages and Systems Required Courses:

COSC 460 - Theory of Computation **Credits:** 3

COSC 420 - Modern Programming Languages **Credits:** 3
or
COSC 424 - Compiler Construction **Credits:** 3

COSC 473 - Software Engineering Practice **Credits:** 3
or
COSC 493 - Internship in Computer Science **Credits:** 6-12 (2)

Controlled Electives:

(3, 4)

COSC 220 - Applied Computer Programming **Credits:** 4

COSC 343 - Introduction to Numerical Methods **Credits:** 3 (5)
or
MATH 343 - Introduction to Numerical Methods **Credits:** 3 (5)

COSC 345 - Computer Networks **Credits:** 3
COSC 355 - Computer Graphics **Credits:** 3
COSC 362 - Unix Systems **Credits:** 3
COSC 365 - Web Architecture and Application Development **Credits:** 3

Upper-Level Electives:

6cr from the following: (4)

COSC 405 - Artificial Intelligence **Credits:** 3
COSC 410 - Computer Architecture **Credits:** 3
COSC 430 - Introduction to Systems Programming **Credits:** 3
COSC 432 - Introduction to Operating Systems **Credits:** 3
COSC 465 - Distributed Processing and Web Services **Credits:** 3
COSC 493 - Internship in Computer Science **Credits:** 6-12
(2)

Other Requirements: 12

Mathematics:

A minor in mathematics which must include: (6)

MATH 171 - Introduction to Linear Algebra **Credits: 3**
MATH 309 - Discrete Mathematics **Credits: 3**

Free Electives: 15-16

Total Degree Requirements: 120

(1) MATH 125 can be substituted by MATH 121.

(2) COSC 493 may be selected after completion of sophomore year. Note: If a 6cr COSC 493 is taken, 3cr are applied toward COSC required courses. If a 12cr COSC 493 is taken, 3cr are applied toward required courses and 3cr toward COSC upper-level electives.

(3) Upper-level electives may be counted as controlled electives. 3cr of Intermediate Level foreign language may be applied toward controlled electives.

(4) Controlled and upper level electives may not be applied toward more than one track in computer science.

(5) COSC 343 or MATH 343 may be counted as a computer science elective or as a part of the mathematics minor, but not both.

(6) MATH 125 and MATH 216 (taken as liberal studies requirements) are also counted towards the minor. Mathematics minor requires at least 6cr of 300-level or higher MATH courses.

Licensed Practical Nurse Track, Nursing, BS

The Pennsylvania State Board of Nursing requires four units of English, three units of social studies, two units of math (one of which is algebra), and two units of science in high school for admission to the nursing major.

Liberal Studies: 43

As outlined in the Liberal Studies Requirements with the following specifications:

Dimensions of Wellness:

Fulfilled by the major

Mathematics:

MATH 217 - Probability and Statistics **Credits: 3**

Natural Science:

CHEM 101 - College Chemistry I **Credits: 4**

CHEM 102 - College Chemistry II **Credits: 4**

(CHEM 111/CHEM 112 could fulfill with permission)

Social Science:

PSYC 101 - General Psychology **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

Liberal Studies Electives: 5

PSYC

No course with NURS prefix

Major: 50-53

Required Courses:

NURS 214 - Health Assessment **Credits:** 3
NURS 312 - Professional Nursing **Credits:** 2
NURS 316 - Evidence-Based Practice in Nursing **Credits:** 3
NURS 334 - Transitions in Professional Nursing **Credits:** 3
NURS 412 - Nursing Management **Credits:** 2
NURS 431 - Public/Community Nursing Clinical **Credits:** 2
NURS 432 - Psychiatric/Mental Health **Credits:** 2
NURS 433 - Psychiatric/Mental Health Clinical **Credits:** 2
NURS 434 - Public/Community Nursing **Credits:** 2
NURS 436 - Adult Health II **Credits:** 4
NURS 437 - Adult Health II Clinical **Credits:** 2.5
NURS 440 - Nursing Management Clinical **Credits:** 2.5
NURS 450 - A Cognitive Approach to Clinical Problem Solving **Credits:** 3 (2)
NURS 493 - Internship **Credits:** 1-12
NURS XXX - Advisor approved NURS elective **Credits:** 3

Adult Health:

NURS 336 - Adult Health I **Credits:** 4
NURS 337 - Adult Health I Clinical **Credits:** 5
or
Credits by Exam **Credits:** 8 (3) and
NURS 493 - Internship **Credits:** 1-12

Maternal Neonatal Health:

NURS 330 - Care of the Child and Family **Credits:** 2
NURS 331 - Care of the Child and Family Clinical **Credits:** 2
NURS 332 - Maternal-Neonatal Health **Credits:** 2
NURS 333 - Maternal-Neonatal Clinical **Credits:** 2
or
Credits by Exam **Credits:** 7 (3) and
NURS 493 - Internship **Credits:** 1-12

Other Requirements: 15

BIOL 150 - Human Anatomy **Credits:** 4
BIOL 240 - Human Physiology **Credits:** 4
BIOL 241 - Introductory Medical Microbiology **Credits:** 4
FDNT 212 - Nutrition **Credits:** 3

Free Electives: 9-12

Total Degree Requirements: 120

(2) Students who achieve a higher score than a specified minimum on a department-required standardized test(s) are exempt from NURS 450. These students would need 12cr of free electives.

(3) Students have the option of earning up to 15cr via examination and taking NURS 493 (up to 2cr) or completing NURS 330, NURS 331, NURS 332, NURS 333, NURS 336, and NURS 337 (17cr). Exam results must be received before students register for any 300- or 400-level nursing courses other than NURS 334.

Management Information Systems, Information Systems Track, BS

Management Information Systems, Information Technology Track, BS

Management, Entrepreneurship and Small Business Management Track, BS

Management, General Management Track, BS

Marketing, BS

The Bachelor of Science degree program in marketing is designed to prepare its majors for a wide range of careers in private and public sector marketing, including sales management, retailing, brand management, advertising, distribution and logistics, customer relationship management, marketing research, public relations, marketing for nonprofit organizations, e-commerce, and international marketing. The program focuses on integrating technical knowledge in all areas of marketing with analytical and communication skills to prepare students for the challenges of the global competition in the 21st century.

Liberal Studies: 47-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 107 - Business Mathematics **Credits:** 3

MATH 108 - Applications of Business Mathematics **Credits:** 1

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

ECON 121 - Principles of Macroeconomics **Credits:** 3

PSYC 101 - General Psychology **Credits:** 3

Liberal Studies Electives: 6

ECON 122 - Principles of Microeconomics **Credits:** 3

MATH 214 - Probability and Statistics for Business Majors **Credits:** 3 (1)

College: Business Administration Core: 36

Required Courses:

ACCT 201 - Accounting Principles I **Credits: 3**
ACCT 202 - Accounting Principles II **Credits: 3**
BCOM 321 - Business and Interpersonal Communications **Credits: 3**
BLAW 235 - Legal Environment of Business **Credits: 3**
COSC 101 - Computer Literacy **Credits: 3**
or
IFMG 101 - Computer Literacy **Credits: 3**
or
IFMG 110 - Business Spreadsheet Computing **Credits: 3 (2)**
FIN 310 - Fundamentals of Finance **Credits: 3**
IFMG 300 - Information Systems: Theory and Practice **Credits: 3**
MGMT 310 - Principles of Management **Credits: 3**
MGMT 330 - Production and Operations Management **Credits: 3**
MGMT 495 - Business Policy **Credits: 3**
MKTG 320 - Principles of Marketing **Credits: 3**
QBUS 215 - Business Statistics **Credits: 3**

Major: Marketing: 24

Required Courses: 9

MKTG 321 - Consumer Behavior **Credits: 3**
MKTG 421 - Marketing Research **Credits: 3**
MKTG 450 - Marketing Strategy **Credits: 3**

Major Electives: 15

Select 15cr from the following:

MKTG 350 - International Business **Credits: 3**
MKTG 430 - International Marketing **Credits: 3**
MKTG 431 - Business-to-Business Marketing **Credits: 3**
MKTG 433 - Advertising **Credits: 3**
MKTG 434 - Business Logistics: Technical Analysis and Applications **Credits: 3**
MKTG 435 - Professional Selling and Sales Management **Credits: 3**
MKTG 436 - Retail Management **Credits: 3**
MKTG 437 - Services Marketing **Credits: 3**
MKTG 439 - Internet Marketing **Credits: 3**
MKTG 440 - Direct Marketing **Credits: 3**
MKTG 442 - Social Cause Marketing for Nonprofit Organizations **Credits: 3**
MKTG 443 - New Product Design and Branding **Credits: 3**
MKTG 444 - Green Marketing **Credits: 3**
MKTG 445 - Social Media Marketing **Credits: 3**
MKTG 448 - Brand Design **Credits: 3**
MKTG 481 - Special Topics I **Credits: 3**
MKTG 482 - Independent Study **Credits: 3**
MKTG 493 - Marketing Internship **Credits: 3-12**

Free Electives: 12-13

Total Degree Requirements: 120

- (1) MATH 214 or MATH 216 or MATH 217.
- (2) IFMG 110 cannot be used as a D/F repeat for COSC 101/IFMG 101.

Mathematics, BS

The program for a mathematics major in the Kopchick College of Natural Sciences and Mathematics has three options. A student may pursue a degree with a major in mathematics or a degree with a major in mathematics with a concentration in either applied mathematics or actuarial science. Those completing a degree with a major in mathematics will be prepared to continue their studies in mathematics in graduate school, though some may enter business, industry, or government service. Students receiving a mathematics degree with a concentration in applied mathematics will be primarily prepared to enter business, industry, or government service in an area where mathematics or computer science is used, or to continue their studies in applied mathematics or computer science in graduate school. Students in the actuarial science concentration take additional course work in finance and economics, preparing them to complete the first two professional actuarial exams and to pursue employment in the areas of insurance and investment.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3**

Liberal Studies Electives: 6

No courses with MATH prefix, includes intermediate-level foreign language

Major: 40-41

Required Courses:

MATH 111 - First-year Seminar **Credits: 1**
MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3**
MATH 171 - Introduction to Linear Algebra **Credits: 3**
MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**
MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits: 3**
MATH 271 - Introduction to Mathematical Proofs I **Credits: 3**
MATH 272 - Introduction to Mathematical Proofs II **Credits: 3**
MATH 341 - Differential Equations **Credits: 3**
MATH 480 - Senior Seminar **Credits: 3**

Controlled Electives:

Four Courses from the Following: 12

MATH 371 - Linear Algebra **Credits: 3**
MATH 421 - Advanced Calculus I **Credits: 3**
MATH 422 - Advanced Calculus II **Credits: 3**
MATH 423 - Complex Variables **Credits: 3**

MATH 427 - Introduction to Topology **Credits: 3**
MATH 476 - Abstract Algebra I **Credits: 3**
MATH 477 - Abstract Algebra II **Credits: 3**

A Minimum of 3 Additional cr From the List Above or the Following: 3-4

MATH 342 - Advanced Mathematics for Applications **Credits: 4**
MATH 350 - History of Mathematics **Credits: 3**
MATH 353 - Theory of Numbers **Credits: 3**
MATH 355 - Foundations of Geometry I **Credits: 3**
MATH 363 - Mathematical Statistics I **Credits: 3**
MATH 364 - Mathematical Statistics II **Credits: 3**
MATH 445 - Deterministic Models in Operations Research **Credits: 3**
MATH 446 - Probabilistic Models in Operations Research **Credits: 3**
MATH 447 - Modeling and Simulation **Credits: 3**

Other Requirements: 3

Computer Science:

COSC 110 - Problem Solving and Structured Programming **Credits: 3**

Free Electives: 29-31

Total Degree Requirements: 120

Media Marketing Track, Communications Media, BS

The **Media Marketing Track** encourages students to develop skills in media promotion, communication consulting, media sales, and media management. This track includes courses from the Department of Marketing. These required marketing courses introduce students to broader marketing concepts in skill-based marketing courses.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 6

COSC 101 - Computer Literacy **Credits: 3**

or

IFMG 101 - Computer Literacy **Credits: 3**

ECON 122 - Principles of Microeconomics **Credits: 3**

Major: 44

Required Courses:

- COMM 101 - Introduction to Communications, Media, and Culture **Credits: 3**
- COMM 150 - Media Aesthetics **Credits: 3**
- COMM 395 - Career Planning in Communications Media **Credits: 1**
- COMM 475 - Senior Portfolio Presentation **Credits: 1**
- COMM 493 - Internship **Credits: 9** (summer only)

Media Production:

Minimum of two courses from the following:

- COMM 207 - Online Media Production **Credits: 3**
- COMM 240 - Communications Graphics **Credits: 3**
- COMM 249 - Basic Audio Recording Techniques **Credits: 3**
- COMM 251 - Television Production **Credits: 3**
- COMM 271 - Beginning Photography **Credits: 3**
- COMM 306 - 2-D Digital Game Development **Credits: 3**
- COMM 340 - Advanced Communication Graphics **Credits: 3**
- COMM 348 - Animation **Credits: 3**
- COMM 349 - Radio Production **Credits: 3**
- COMM 350 - Digital Storytelling **Credits: 3**
- COMM 351 - Advanced Video Production **Credits: 3**
- COMM 355 - Editing for Video and Film **Credits: 3**
- COMM 360 - Digital Sports Production **Credits: 3**
- COMM 371 - Advanced Photography **Credits: 3**
- COMM 374 - Documentary Photography **Credits: 3**
- COMM 406 - 3-D Game and Simulation Design and Development **Credits: 3**
- COMM 407 - Television Feature Production **Credits: 3**
- COMM 408 - Media Field Studies **Credits: 3**
- COMM 440 - Multimedia Production **Credits: 3**
- COMM 449 - Advanced Audio Recording Techniques **Credits: 3**
- COMM 451 - Multimedia News Production **Credits: 3**
- COMM 471 - Advanced Image Editing **Credits: 3**
- COMM 474 - Commercial Photography **Credits: 3**

Media Marketing Courses: 12

- COMM 205 - Making Presentations with Media **Credits: 3**
or
- COMM 261 - Teamwork and Communication Skills for College and Career **Credits: 3**

- COMM 401 - Media Programming and Promotion **Credits: 3**
- COMM 470 - Media Management and Sales **Credits: 3**
- COMM 477 - Freelancing and Entrepreneurship in Media **Credits: 3**

Controlled Electives:

- Other COMM elective courses **Credits: 6**

Marketing Requirements: 12

- MKTG 320 - Principles of Marketing **Credits: 3**
- MKTG 433 - Advertising **Credits: 3**
- MKTG 439 - Internet Marketing **Credits: 3**

MKTG 445 - Social Media Marketing **Credits: 3**

Other Requirements: 9

Additional courses outside Communications Media, advisor approval required.

Free Electives: 8-9

Total Degree Requirements: 120

Media Production Track, Communications Media, BS

Students who seek a more rigorous production experience will find that in the **Media Production Track**. In this track, students will take a set of five COMM production courses that will help them to acquire higher-level production skills. Students will learn the foundational skills associated with their chosen production area and learn to use contemporary post-production software and equipment. This more specialized track will prepare students for employment in various production fields, including video, audio, radio, graphics, photography and games.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 6

COSC 101 - Computer Literacy **Credits: 3**

or

IFMG 101 - Computer Literacy **Credits: 3**

no courses with COMM prefix

Major: 44

Required Courses:

COMM 101 - Introduction to Communications, Media, and Culture **Credits: 3**

COMM 150 - Media Aesthetics **Credits: 3**

COMM 395 - Career Planning in Communications Media **Credits: 1**

COMM 475 - Senior Portfolio Presentation **Credits: 1**

COMM 493 - Internship **Credits: 9** (summer only)

Writing-Intensive Course:

One writing-intensive COMM course **Credits: 3**

Basic Media Production:

(1)

Minimum of two courses from the following:

- COMM 207 - Online Media Production **Credits: 3**
- COMM 240 - Communications Graphics **Credits: 3**
- COMM 249 - Basic Audio Recording Techniques **Credits: 3**
- COMM 251 - Television Production **Credits: 3**
- COMM 271 - Beginning Photography **Credits: 3**
- COMM 306 - 2-D Digital Game Development **Credits: 3**
- COMM 349 - Radio Production **Credits: 3**

Advanced Media Production: 9

Minimum of three courses from the following:

- COMM 340 - Advanced Communication Graphics **Credits: 3**
- COMM 348 - Animation **Credits: 3**
- COMM 350 - Digital Storytelling **Credits: 3**
- COMM 351 - Advanced Video Production **Credits: 3**
- COMM 355 - Editing for Video and Film **Credits: 3**
- COMM 360 - Digital Sports Production **Credits: 3**
- COMM 371 - Advanced Photography **Credits: 3**
- COMM 374 - Documentary Photography **Credits: 3**
- COMM 406 - 3-D Game and Simulation Design and Development **Credits: 3**
- COMM 407 - Television Feature Production **Credits: 3**
- COMM 408 - Media Field Studies **Credits: 3**
- COMM 440 - Multimedia Production **Credits: 3**
- COMM 449 - Advanced Audio Recording Techniques **Credits: 3**
- COMM 451 - Multimedia News Production **Credits: 3**
- COMM 471 - Advanced Image Editing **Credits: 3**
- COMM 474 - Commercial Photography **Credits: 3**

Controlled Electives: 9

Other COMM elective courses, NOT including production courses

Other Requirements: 21

For courses outside Communications Media, advisor approval required. A minor is strongly encouraged.

Free Electives: 8-9

Total Degree Requirements: 120

(1) At least 12 COMM credits must be 300 level or higher.

(2) At least 6cr (two courses) in production must be in the same production area.

Media Studies Track, Communications Media, BS

The **Media Studies Track** seeks to broadly educate students in communications media by encouraging them to develop their communication skills, written, oral, and visual. Courses include components to develop critical thinking, collaboration, and research skills. The flexibility of the program allows students to explore a range of courses in media theory, criticism, culture, and current media issues. Beginning level production courses introduce concepts of producing media messages.

With 21 credits of required out of department electives, Communications Media students in the Media Studies and Media Production Tracks are highly encouraged to pursue a minor in another program that complements their degree in Communications Media.

The department faculty offers a wide variety of experience in all areas of Communications Media. With the combination of classroom work and the required internship program, departmental graduates are competitive candidates for positions in various areas. Students graduating from this program have obtained positions in areas such as radio, television, cable television, public relations, advertising media, media relations, and corporate media relations.

Students changing majors from other academic departments within the university are required to be in academic good standing before the transfer will be approved.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 6

COSC 101 - Computer Literacy **Credits: 3**

or

IFMG 101 - Computer Literacy **Credits: 3**

No courses with COMM prefix

Major: 44

Required Courses:

COMM 101 - Introduction to Communications, Media, and Culture **Credits: 3**

COMM 150 - Media Aesthetics **Credits: 3**

COMM 395 - Career Planning in Communications Media **Credits: 1**

COMM 475 - Senior Portfolio Presentation **Credits: 1**

COMM 493 - Internship **Credits: 9** (summer only)

Writing-Intensive Course:

One writing-intensive COMM course **Credits: 3**

Media Studies: 12

(1)

Minimum of four courses from the following:

COMM 205 - Making Presentations with Media **Credits: 3**
COMM 206 - History and Theory of Making Games **Credits: 3**
COMM 230 - Global Media and Communication **Credits: 3**
COMM 261 - Teamwork and Communication Skills for College and Career **Credits: 3**
COMM 302 - Research in Communications Media **Credits: 3**
COMM 303 - Scriptwriting **Credits: 3**
COMM 315 - Persuasive Media Writing **Credits: 3**
COMM 325 - Gender in Media **Credits: 3**
COMM 335 - Communications Consulting and Project Management **Credits: 3**
COMM 345 - Television Criticism **Credits: 3**
COMM 354 - Media Law and Policy **Credits: 3**
COMM 375 - Mass Media and Behavior **Credits: 3**
COMM 380 - The History of African Americans in Film **Credits: 3**
COMM 401 - Media Programming and Promotion **Credits: 3**
COMM 403 - Multimedia News Writing **Credits: 3**
COMM 414 - Music, Media, and Culture **Credits: 3**
COMM 420 - Media Portrayal of Crime **Credits: 3**
COMM 445 - Cinematic Directors **Credits: 3**
COMM 460 - Disturbing Trends in Communication Technology **Credits: 3**
COMM 470 - Media Management and Sales **Credits: 3**
COMM 477 - Freelancing and Entrepreneurship in Media **Credits: 3**
COMM 480 - Seminar in Communications Media **Credits: 3**

Minimum of Two Production Courses from the Following: 6

COMM 207 - Online Media Production **Credits: 3**
COMM 240 - Communications Graphics **Credits: 3**
COMM 249 - Basic Audio Recording Techniques **Credits: 3**
COMM 251 - Television Production **Credits: 3**
COMM 271 - Beginning Photography **Credits: 3**
COMM 306 - 2-D Digital Game Development **Credits: 3**
COMM 348 - Animation **Credits: 3**
COMM 350 - Digital Storytelling **Credits: 3**
COMM 351 - Advanced Video Production **Credits: 3**
COMM 355 - Editing for Video and Film **Credits: 3**
COMM 360 - Digital Sports Production **Credits: 3**
COMM 371 - Advanced Photography **Credits: 3**
COMM 374 - Documentary Photography **Credits: 3**
COMM 406 - 3-D Game and Simulation Design and Development **Credits: 3**
COMM 407 - Television Feature Production **Credits: 3**
COMM 408 - Media Field Studies **Credits: 3**
COMM 440 - Multimedia Production **Credits: 3**
COMM 449 - Advanced Audio Recording Techniques **Credits: 3**
COMM 451 - Multimedia News Production **Credits: 3**
COMM 471 - Advanced Image Editing **Credits: 3**
COMM 474 - Commercial Photography **Credits: 3**

Controlled Electives: 6

Other COMM elective courses including courses from the above lists not taken as part of those requirements

Other Requirements: 21

Courses outside Communications Media that augment the student's major course of study (advisor approval).

Free Electives: 8-9

Total Degree Requirements: 120

(1) At least 12 COMM credits must be 300 level or higher.

Medical Technology, BS

Medical Technology encompasses the study of analytical and diagnostic procedures used in clinical laboratories and in medical research. Medical technologists (also known as clinical laboratory scientists) perform a variety of laboratory tests, upon which the physician depends for accurate diagnosis, prognosis, and proper treatment of the patient. The program is designed as a 3+1 with three years at IUP taking the required sciences and liberal studies courses and then one year of clinical experience at an IUP-approved affiliate program. All of the coursework at IUP is preparatory toward the final year and the requirements by the Medical Technology profession. At the end of their senior year, upon successful completion of the program at an articulated clinical affiliate accredited within the discipline, IUP will grant 30 credits that will be applied to the student's transcript and the bachelor's degree in Medical Technology will be conferred. The program also prepares the student for graduate and professional schools. IUP maintains affiliations with accredited schools of medical technology/ clinical laboratory science. To be competitive for clinical placement, the student must have a minimum overall GPA and math/science GPA of 2.8. Since admission to any hospital program is on a competitive basis, IUP cannot guarantee admission.

The following programs maintain agreements of affiliation with IUP:

UPMC Altoona Regional Health System, Altoona; Conemaugh Memorial Medical Center, Johnstown; Pennsylvania General College of Health Sciences, Lancaster; the Reading Hospital School of Health Science, Reading; St. Christopher's Hospital for Children, Philadelphia; St. Vincent Health Center, Erie; UPMC Susquehanna Health, Williamsport; UPMC Chautauqua WCA Hospital, Jamestown, New York; and Wellspan York Hospital, York.

Completion of academic studies at IUP and of one year of clinical experience qualifies the student to take a national certification examination. Successful results on this examination lead to certification as a professionally qualified medical technologist/clinical laboratory scientist.

Liberal Studies:44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 217 - Probability and Statistics **Credits: 3**

Natural Science:

CHEM 111 - General Chemistry I **Credits: 4**

CHEM 112 - General Chemistry II **Credits: 4**

Writing Intensive:

One required

Liberal Studies Elective: 3

PHYS 111 - Physics I Lecture **Credits: 3**

Major: 30

Required Courses:

Articulated courses in Medical Technology transferred from affiliation agreement (1)

- MEDT 494 - Clinical Microbiology **Credits:** 6-10
- MEDT 495 - Clinical Chemistry **Credits:** 7-10
- MEDT 496 - Clinical Hematology/Coagulation **Credits:** 4-7
- MEDT 497 - Clinical Immunohematology **Credits:** 3-6
- MEDT 498 - Clinical Immunology/Serology **Credits:** 2-4
- MEDT 499 - Clinical Seminar **Credits:** 0-6

Other Requirements: 40

- BIOL 150 - Human Anatomy **Credits:** 4
- BIOL 202 - Principles of Cell and Molecular Biology **Credits:** 4
- BIOL 240 - Human Physiology **Credits:** 4
- BIOL 241 - Introductory Medical Microbiology **Credits:** 4
- or
- BIOL 250 - Principles of Microbiology **Credits:** 4
- BIOL 364 - Immunology **Credits:** 3
- CHEM 231 - Organic Chemistry I **Credits:** 4
- CHEM 332 - Organic Chemistry II **Credits:** 4
- CHEM 325 - Analytical Chemistry I **Credits:** 4
- CHEM 351 - Biochemistry **Credits:** 4
- PHYS 121 - Physics I Lab **Credits:** 1
- PHYS 112 - Physics II Lecture **Credits:** 3
- PHYS 122 - Physics II Lab **Credits:** 1

Free Electives: 6

Total Degree Requirements: 120

See advisory paragraph "Timely Completion of Degree Requirements" in the section on Requirements for Graduation.

(1) These courses are offered by affiliating, hospital-based schools of medical technology (also known as clinical laboratory science). Areas of study are consistent with requirements of the National Accrediting Agency for Clinical Laboratory Sciences and are completed during the final 12 months of the degree program at an affiliating school.

Nanomanufacturing Technology Track, Physics, BS

Students in the **BS—Physics/Nanomanufacturing Technology Track (NMT)** take one semester of experiential learning in the high-tech field of semiconductor device manufacturing at the state-of-the-art facility at Penn State—University Park Campus. Students must earn a GPA of at least 3.0 in the required science and mathematics courses to be considered for admission into the capstone semester at Penn State. Graduates of the BS—Physics/ NMT may enter careers in industry and education.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

- MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits:** 3

Natural Science:

PHYS 131 - Physics I-C Lecture **Credits:** 3
PHYS 141 - Physics I-C Lab **Credits:** 1
PHYS 132 - Physics II-C Lecture **Credits:** 3
PHYS 142 - Physics II-C Lab **Credits:** 1

Liberal Studies Elective: 3

MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits:** 3
No courses with PHYS prefix

Major: 46

Required Courses:

PHYS 131 - Physics I-C Lecture **Credits:** 3 (1)
PHYS 132 - Physics II-C Lecture **Credits:** 3 (1)
PHYS 141 - Physics I-C Lab **Credits:** 1 (1)
PHYS 142 - Physics II-C Lab **Credits:** 1 (1)
PHYS 331 - Modern Physics **Credits:** 3
PHYS 345 - Optics **Credits:** 3
PHYS 441 - Classical Mechanics **Credits:** 3
PHYS 451 - Electricity and Magnetism **Credits:** 3

Required PSU Capstone Courses:

NMTT 311 - Materials, Safety, and Equipment Overview for Nanofabrication **Credits:** 3
NMTT 312 - Basic Nanofabrication Processes **Credits:** 3
NMTT 313 - Thin Films in Nanofabrication **Credits:** 3
NMTT 314 - Lithography and Patterning Techniques **Credits:** 3
NMTT 315 - Materials Modifications in Nanofabrication **Credits:** 3
NMTT 316 - Characterization, Packaging, and Testing of Nanofabrication Structures **Credits:** 3

Additional Required Physics Courses:

PHYS 231 - Electronics **Credits:** 4
PHYS 350 - Intermediate Experimental Physics I **Credits:** 3
PHYS 355 - Computer Interfacing **Credits:** 3
PHYS 475 - Physics of Semiconductor Devices I **Credits:** 3
PHYS 476 - Physics of Semiconductor Devices II **Credits:** 3

Other Requirements: 27-23

CHEM 111 - General Chemistry I **Credits:** 4
CHEM 112 - General Chemistry II **Credits:** 4
COSC 110 - Problem Solving and Structured Programming **Credits:** 3
COSC 343 - Introduction to Numerical Methods **Credits:** 3

Foreign Language Intermediate Level: 0-6

(2)

Free Electives: 7-13

Total Degree Requirements: 120

(1) Credits are counted in the Liberal Studies natural science requirement.

(2) Six credits of computer programming will substitute for the foreign language requirement: COSC 110, COSC 210, or higher-level computer science courses (COSC 343 recommended), with department permission.

Natural Science, BS

Liberal Studies: 48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**

Natural Science:

CHEM 111 - General Chemistry I **Credits: 4**

CHEM 112 - General Chemistry II **Credits: 4**

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Writing Intensive:

A second writing-intensive course is not required for three-year students who transfer to a professional school with an articulation agreement.

Liberal Studies Elective: 3

COSC 101 - Computer Literacy **Credits: 3**

or

IFMG 101 - Computer Literacy **Credits: 3**

No courses with SCI prefix

Major: 43

Required Courses:

Biology:

BIOL 150 - Human Anatomy **Credits: 4**

BIOL 201 - Principles of Ecology and Evolution **Credits: 4**

BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**

BIOL 203 - Principles of Genetics and Development **Credits: 4**

BIOL 240 - Human Physiology **Credits: 4**
BIOL 241 - Introductory Medical Microbiology **Credits: 4**

Chemistry:

CHEM 231 - Organic Chemistry I **Credits: 4**
CHEM 332 - Organic Chemistry II **Credits: 4**
or
CHEM 351 - Biochemistry **Credits: 4**

Physics:

PHYS 111 - Physics I Lecture **Credits: 3**
PHYS 121 - Physics I Lab **Credits: 1**
PHYS 112 - Physics II Lecture **Credits: 3**
PHYS 122 - Physics II Lab **Credits: 1**

Mathematics:

MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**

Other Requirements: 0-6

Foreign Language Intermediate Level 0-6 cr

Free Electives: 23-29

Total Degree Requirements: 120

Nuclear Medicine Technology Track, Medical Imaging, BS

The program leading to the bachelor of science degree in Medical Imaging is designed to prepare students for admission into an IUP affiliate institution focused on one of three tracks: Nuclear Medicine Technology, Diagnostic Medical Sonography (Ultrasound), or Echocardiography. This program is a 3+1 whereby the student spends the first three years at IUP taking the required math/science and liberal studies courses and then a year at an affiliate where they earn a certificate in one of the specialty diagnostic imaging programs. All of the coursework at IUP is preparatory towards the final year and the requirements by the Medical Imaging profession. A "C" or better in the following courses is required: MATH 105, CHEM 101, ENGL 101, PHYS 111, BIOL 150, and ENGL 310 or BCOM 321. Acceptance at an affiliate school is contingent upon the student meeting the academic program requirements. At the end of their senior year, upon successful completion of the certificate program at an articulated clinical affiliate accredited within the specific discipline, IUP will grant 32 credits that will be applied to the student's transcript and the bachelor's degree in the Diagnostic Imaging track will be conferred.

Nuclear Medicine Technology is a medical specialty in which allied health care professionals, under the direction of a nuclear medicine physician, use radioactive materials in the diagnosis and treatment of disease. They are responsible for patient education and preparation regarding the nuclear medicine procedures, administration of radiopharmaceuticals, performing complex computer imaging studies, and radiation safety procedures for both patients and staff. The nuclear medicine technologist's skills complement those of the nuclear medicine physician.

Students are admitted to the Medical Imaging major as freshmen into any of the three tracks. Transfer students and those with a previous degree may also be admitted into one of the tracks. Students must meet specific academic requirements to be considered for admission to the affiliate Medical Imaging track. Admission is competitive; IUP cannot guarantee admission. Information regarding academic requirements and other special requirements for the clinical year is available in the department's office.

The Nuclear Medicine Technology program is fully accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine

Technology. Diagnostic Medical Sonography and Echocardiography Programs are accredited by the Commission on Accreditation of Allied Health Education Programs upon recommendation of the Joint Review Committee on Education in Diagnostic Medical Sonography.

Liberal Studies: 47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 105 - College Algebra **Credits: 3**

Philosophy/Religious Studies:

PHIL 130 - Introduction to Biomedical Ethics **Credits: 3**

Natural Science:

CHEM 101 - College Chemistry I **Credits: 4**

CHEM 102 - College Chemistry II **Credits: 4**

Social Science:

PSYC 101 - General Psychology **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

Liberal Studies Electives: 6

COSC 101 - Computer Literacy **Credits: 3**

or

IFMG 101 - Computer Literacy **Credits: 3**

PHYS 111 - Physics I Lecture **Credits: 3**

No courses with NMDT prefix

Major: 35

Required Courses:

Articulated courses in track transferred from affiliation agreement (1)

IMAG 101 - Careers in Medical Imaging **Credits: 1**

IMAG 480 - Medical Imaging Seminar **Credits: 2**

Other Requirements: 23

(2)

BIOL 150 - Human Anatomy **Credits: 4**

BIOL 240 - Human Physiology **Credits: 4**

BIOL 241 - Introductory Medical Microbiology **Credits: 4**

ENGL 310 - Public Speaking **Credits: 3**

or

BCOM 321 - Business and Interpersonal Communications **Credits: 3**

NURS 314 - Health Policy and Law **Credits: 3**

PHYS 121 - Physics I Lab **Credits: 1**

PHYS 112 - Physics II Lecture **Credits: 3**

PHYS 122 - Physics II Lab **Credits: 1**

Free Electives: 15

(3)

Total Degree Requirements: 120

(1) These courses are offered at the University of Findlay/Nuclear Medicine Institute, Findlay, Ohio, and/or Community College of Allegheny County nuclear medicine technology program, Pittsburgh. These areas of study are consistent with requirements of the JRCNMT. All eight of these areas of study are completed during the final 12 months of the degree program.

(2) Students are also required to complete a medical terminology course/ program. Options to fulfill this requirement must be approved by the coordinator of allied health professions.

(3) Two writing-intensive courses are required. Both courses may be from either Liberal Studies or Free Electives.

Nursing, BS

The Pennsylvania State Board of Nursing requires two units of high school mathematics (one of which is algebra) for admission to the nursing major.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 217 - Probability and Statistics **Credits: 3**

Natural Science:

CHEM 101 - College Chemistry I **Credits: 4**

CHEM 102 - College Chemistry II **Credits: 4**

(CHEM 111/CHEM 112 could fulfill with permission)

Social Science:

PSYC 101 - General Psychology **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

Liberal Studies Elective: 3

PSYC 215 - Developmental Psychology **Credits: 3**

No courses with NURS prefix

Major: 52-55

Required Courses:

NURS 211 - Fundamentals I Clinical **Credits: 1**
NURS 212 - Fundamentals I Theory **Credits: 3**
NURS 213 - Fundamentals II Clinical **Credits: 1**
NURS 214 - Health Assessment **Credits: 3**
NURS 236 - Fundamentals II Theory **Credits: 3**
NURS 312 - Professional Nursing **Credits: 2**
NURS 316 - Evidence-Based Practice in Nursing **Credits: 3**
NURS 330 - Care of the Child and Family **Credits: 2**
NURS 331 - Care of the Child and Family Clinical **Credits: 2**
NURS 332 - Maternal-Neonatal Health **Credits: 2**
NURS 333 - Maternal-Neonatal Clinical **Credits: 2**
NURS 336 - Adult Health I **Credits: 4**
NURS 337 - Adult Health I Clinical **Credits: 5**
NURS 412 - Nursing Management **Credits: 2**
NURS 431 - Public/Community Nursing Clinical **Credits: 2**
NURS 432 - Psychiatric/Mental Health **Credits: 2**
NURS 433 - Psychiatric/Mental Health Clinical **Credits: 2**
NURS 434 - Public/Community Nursing **Credits: 2**
NURS 436 - Adult Health II **Credits: 4**
NURS 437 - Adult Health II Clinical **Credits: 2.5**
NURS 440 - Nursing Management Clinical **Credits: 2.5**
NURS 450 - A Cognitive Approach to Clinical Problem Solving **Credits: 3 (1)**
NURS 493 - Internship **Credits: 1-12**

Other Requirements: 15

Science Sequence:

BIOL 150 - Human Anatomy **Credits: 4**
BIOL 240 - Human Physiology **Credits: 4**
BIOL 241 - Introductory Medical Microbiology **Credits: 4**
FDNT 212 - Nutrition **Credits: 3**

Free Electives: 6-9

Total Degree Requirements: 120

See advisory paragraph "Timely Completion of Degree Requirements" in the section on Requirements for Graduation.

(1) Students who achieve a higher score than a specified minimum on a department-required standardized test(s) are exempt from NURS 450. These students would need 9cr of free electives.

Nutrition Track, Nutrition, BS

The Nutrition Track provides flexibility and options for students based upon their career goals or plans for a graduate education, depending upon the minor or second major that is chosen. Students can personalize the track toward employment within the fitness industry, community nutrition and health education, food and nutrition management, or other specialty areas. Students who minor in exercise science are prepared to take certification

examinations offered by professional organizations, including the American College of Sports Medicine and the National Strength and Conditioning Association, among others. Those who graduate in the Nutrition Track with a minor in exercise science are eligible for early admission to the master of science in exercise science and/or food and nutrition. Students who minor in community health are eligible to take the National Commission for Health Education Credentialing exam and be recognized as a Certified Health Education Specialist (CHES). Students in the Nutrition Track who complete Medical Nutrition Therapy I and II are eligible for employment with the Special Supplemental Nutrition Program for Women, Infants, and Children. Students who wish to pursue graduate education in nutrition or other natural science-related programs should work carefully with their advisor so that appropriate chemistry, biology, and nutrition electives are chosen. Students receive specific academic advisement regarding science and nutrition courses needed to progress to graduation, depending upon their career plans. Faculty advisors work across disciplines to effectively mentor students toward their educational and career goals. Students in the Nutrition Track may transfer to the Dietetics Track if their GPA is greater than or equal to a 3.0 and grades in science and food and nutrition courses are greater than or equal to a "C" or better. Students without these academic accomplishments are not competitive to receive a required post-graduate supervised practice experience to become a Registered Dietitian Nutritionist.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 217 - Probability and Statistics **Credits:** 3

Natural Science:

CHEM 101 - College Chemistry I **Credits:** 4

CHEM 102 - College Chemistry II **Credits:** 4

or

BIOL 104 - Human Biology: How the Human Body Works **Credits:** 4

BIOL 106 - Human Genetics and Health **Credits:** 3 (1)

Liberal Studies Elective: 3

No courses with FDNT prefix (2)

Major: 20

Required Courses:

(1)

FDNT 110 - Careers in Food and Nutrition **Credits:** 1

FDNT 150 - Foods **Credits:** 3

FDNT 151 - Foods Laboratory **Credits:** 1

FDNT 212 - Nutrition **Credits:** 3

FDNT 213 - Life Cycle Nutrition **Credits:** 3

FDNT 364 - Methods of Teaching Food and Nutrition **Credits:** 3 (3)

FDNT 402 - Community Nutrition **Credits:** 3

FDNT 493 - Internship **Credits:** 3-12

Controlled Electives: 27-30

Nutrition Track:

FDNT electives (200 level and above) **Credits:** 6-12 (4)

Program minor, certificate, or core concentration required for program completion **Credits:** 18-21 (5)

Free Electives: 23-32

Total Degree Requirements: 120

(1) Depending upon career goals, different chemistry and biology coursework may be needed in addition to the Natural Science Liberal Studies requirements. Students who desire to change to the dietetics track should select CHEM 101/CHEM 102.

(2) For the gerontology certificate, PSYC 378 can be applied as a Liberal Studies elective. For the business administration minor, ECON 122 can be applied as a Liberal Studies elective.

(3) FCSE 450 may be substituted, with permission of the Human Development, Fashion, and Interior Design department chairperson.

(4) Number of FDNT electives depends upon number of credits in the minor, certificate, or concentration. Students who choose the exercise science or community health minor must take FDNT 245 Sports Nutrition.

(5) Select one of the following:

Minor in anthropology, biochemistry, biology, biomedical sciences, business administration, chemistry, human development and family studies, communications media, community health, exercise science, global health, hospitality management, journalism and public relations, psychology, sociology, or sustainability studies. Other minors with Food and Nutrition department chairperson permission.

(6) Students who desire certification as a Certified Health Education Specialist (CHES) must also choose KHSS 341 and NURS 410.

Physics, BS

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits:** 3

Natural Science:

PHYS 131 - Physics I-C Lecture **Credits:** 3

PHYS 141 - Physics I-C Lab **Credits:** 1

PHYS 132 - Physics II-C Lecture **Credits:** 3

PHYS 142 - Physics II-C Lab **Credits:** 1

Liberal Studies Elective: 3

MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits:** 3

No courses with PHYS prefix

Major: 34

Required Courses:

PHYS 131 - Physics I-C Lecture **Credits:** 3 (1)

PHYS 132 - Physics II-C Lecture **Credits:** 3 (1)

PHYS 141 - Physics I-C Lab **Credits:** 1 (1)
PHYS 142 - Physics II-C Lab **Credits:** 1 (1)
PHYS 331 - Modern Physics **Credits:** 3
PHYS 345 - Optics **Credits:** 3
PHYS 441 - Classical Mechanics **Credits:** 3
PHYS 451 - Electricity and Magnetism **Credits:** 3

Additional Required Courses

PHYS 231 - Electronics **Credits:** 4
PHYS 342 - Thermal and Statistical Physics **Credits:** 3
PHYS 350 - Intermediate Experimental Physics I **Credits:** 3
PHYS 401 - Theoretical Physics **Credits:** 3
PHYS 461 - Quantum Mechanics I **Credits:** 3

One Course from the Following: 3

PHYS 472 - Nuclear Physics **Credits:** 3
or
PHYS 490

PHYS Majors Course: 3

One additional PHYS Majors Course: 3

Other Requirements: 16-22

COSC 110 - Problem Solving and Structured Programming **Credits:** 3
MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits:** 3
MATH 341 - Differential Equations **Credits:** 3
MATH 342 - Advanced Mathematics for Applications **Credits:** 4

One Course from the Following:

COSC 343 - Introduction to Numerical Methods **Credits:** 3
MATH 171 - Introduction to Linear Algebra **Credits:** 3
MATH 363 - Mathematical Statistics I **Credits:** 3
MATH 421 - Advanced Calculus I **Credits:** 3
MATH 423 - Complex Variables **Credits:** 3

Foreign Language Intermediate Level: 0-6

(2)

Free Electives: 20-26

Total Degree Requirements: 120

(1) Credits are counted in the Liberal Studies natural science requirement.

(2) Six credits of computer programming will substitute for the foreign language requirement: COSC 110, COSC 210, or higher-level computer science courses (COSC 343 recommended), with department permission.

Pre-athletic Training Track, Physical Education and Sport, BS

The Pre-Athletic Training Track prepares students for admission into a professional-level masters degree program in Athletic Training. Accelerated program progression allows students who meet eligibility requirements to apply for early admission into IUP's Master of Science program in Athletic Training program. Students will work closely with an advisor to ascertain the likelihood of early admission into graduate school and will be advised to switch into another PESP Track if appropriate. The first four semesters of the Pre-Athletic Training Track align closely with the Exercise Science Track and allows for seamless transition into Exercise Science if early admission requirements are not likely to be met by the end of the sixth semester. The masters degree in athletic training will be implemented beginning Summer 2020.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 217 - Probability and Statistics **Credits: 3**

Natural Science:

BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**

BIOL 106 - Human Genetics and Health **Credits: 3**

BIOL 116 - Human Genetics and Health Laboratory **Credits: 1**

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Elective: 3

FDNT 145 - Personal Nutrition **Credits: 3**

Major: 21

Core Requirements:

KHSS 135 - Careers in Kinesiology, Health, and Sport **Credits: 1**

KHSS 175 - Prevention and Care of Injuries to the Physically Active **Credits: 2**

KHSS 209 - Motor Behavior **Credits: 3**

KHSS 221 - Human Structure and Function **Credits: 3**

KHSS 341 - Evaluations and Analytics in Kinesiology **Credits: 3**

KHSS 343 - Physiology of Exercise **Credits: 3**

KHSS 344 - Adapted Physical Activity and Sport **Credits: 3**

KHSS 441 - Psychosocial Implications for Health and Physical Education **Credits: 3**

Pre-Athletic Training Requirements: 28

BIOL 150 - Human Anatomy **Credits: 4**

BIOL 200 - Medical Terminology **Credits: 2**

BIOL 240 - Human Physiology **Credits: 4**

CHEM 101 - College Chemistry I **Credits: 4**

KHSS 286 - Personal Training Practicum **Credits: 3**

KHSS 315 - Biomechanics **Credits: 3**
KHSS 347 - Physiology of Exercise Laboratory **Credits: 1**
KHSS 375 - Physiological Basis of Strength Training and Conditioning **Credits: 3**
PHYS 111 - Physics I Lecture **Credits: 3**
or
PHYS 151 - Medical Physics Lecture **Credits: 3**
PHYS 121 - Physics I Lab **Credits: 1**
or
PHYS 161 - Medical Physics Lab **Credits: 1**

Free Electives: 27

(1)

Total Degree Requirements: 120

(1) Some elective credits can be used towards the MS degree program in Athletic Training if eligible for early admission.

Pre-chiropractic Track, Natural Science, BS

Accelerated three-year New York Chiropractic College, Logan Chiropractic College, Sherman Chiropractic College, and Parker Chiropractic programs. A maximum of 30cr of work may be transferred after the first year at one of the chiropractic school programs. Upon completion of the first year of studies at one of the chiropractic school programs, a transcript from that school is to be sent by the student to the dean of the College of Natural Sciences and Mathematics with a note requesting application materials for graduation.

Liberal Studies: 48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**

Natural Science:

CHEM 111 - General Chemistry I **Credits: 4**
CHEM 112 - General Chemistry II **Credits: 4**

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Writing Intensive:

A second writing-intensive course is not required for three-year students who transfer to a professional school with an articulation agreement.

Liberal Studies Elective: 3

COSC 101 - Computer Literacy **Credits: 3**
No courses with SCI prefix

Major: 43

Required Courses:

BIOL 150 - Human Anatomy **Credits: 4**
BIOL 201 - Principles of Ecology and Evolution **Credits: 4**
BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**
BIOL 203 - Principles of Genetics and Development **Credits: 4**
BIOL 240 - Human Physiology **Credits: 4**
BIOL 241 - Introductory Medical Microbiology **Credits: 4**
CHEM 231 - Organic Chemistry I **Credits: 4**

CHEM 332 - Organic Chemistry II **Credits: 4**

or

CHEM 351 - Biochemistry **Credits: 4**

PHYS 111 - Physics I Lecture **Credits: 3**
PHYS 121 - Physics I Lab **Credits: 1**
PHYS 112 - Physics II Lecture **Credits: 3**
PHYS 122 - Physics II Lab **Credits: 1**
MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**

Other Requirements: 0-6

Foreign Language Intermediate Level

Free Electives: 23-29

(1)

Electives to meet minimum of 90 IUP cr and minimum of 24cr in Humanities and Social Sciences for admission to affiliated chiropractic colleges after three years at IUP

Maximum cr for work at affiliated chiropractic school **Credits: 30**

Total Degree Requirements: 120

(1) Student is to work with his/her advisor to select appropriate free electives for professional school. Additional courses in biology and KHSS 315 or KHSS 345 are recommended.

Pre-dentistry Track, Natural Science, BS

Accelerated three-year Temple University School of Dentistry program. A maximum of 30cr of work may be transferred after the first year at Temple University School of Dentistry. Upon completion of the first year of studies at Temple University School of Dentistry, a transcript from Temple University is to be sent by the student to the dean of the College of Natural Sciences and Mathematics with a note requesting application materials for graduation.

Liberal Studies: 48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**

Natural Science:

CHEM 111 - General Chemistry I **Credits: 4**

CHEM 112 - General Chemistry II **Credits: 4**

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Writing Intensive:

A second writing-intensive course is not required for three-year students who transfer to a professional school with an articulation agreement.

Liberal Studies Elective: 3

COSC 101 - Computer Literacy **Credits: 3**

No courses with SCI prefix

Major: 43

Required Courses:

BIOL 150 - Human Anatomy **Credits: 4**

BIOL 201 - Principles of Ecology and Evolution **Credits: 4**

BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**

BIOL 203 - Principles of Genetics and Development **Credits: 4**

BIOL 240 - Human Physiology **Credits: 4**

BIOL 241 - Introductory Medical Microbiology **Credits: 4**

CHEM 231 - Organic Chemistry I **Credits: 4**

CHEM 332 - Organic Chemistry II **Credits: 4**

or

CHEM 351 - Biochemistry **Credits: 4**

PHYS 111 - Physics I Lecture **Credits: 3**

PHYS 121 - Physics I Lab **Credits: 1**

PHYS 112 - Physics II Lecture **Credits: 3**

PHYS 122 - Physics II Lab **Credits: 1**

MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**

Other Requirements: 0-6

Foreign Language Intermediate Level

Free Electives: 23-29

(1)

Electives to meet minimum of 90 IUP cr and minimum of 24cr in Humanities and Social Sciences for admission to affiliated dental school after three years at IUP

Maximum cr for work at affiliated dental school **Credits: 30**

Total Degree Requirements: 120

(1) Student is to work with his/her advisor to select appropriate free electives for professional school. Ceramics and additional courses in biology are highly recommended.

Pre-engineering Track, Physics, BS

The **BS—Physics/Pre-engineering Track** is designed to prepare students for admission to engineering school. The student transfers to the affiliated engineering school after appropriate IUP course work has been completed. When sufficient credit from the affiliated engineering school has been earned, the student transfers the credit back to IUP to earn the bachelor of science degree.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3**

Natural Science:

PHYS 131 - Physics I-C Lecture **Credits: 3**

PHYS 141 - Physics I-C Lab **Credits: 1**

PHYS 132 - Physics II-C Lecture **Credits: 3**

PHYS 142 - Physics II-C Lab **Credits: 1**

Liberal Studies Elective: 3

MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3**

No courses with PHYS prefix

Major: 34

Required Courses:

PHYS 131 - Physics I-C Lecture **Credits: 3** (1)

PHYS 132 - Physics II-C Lecture **Credits: 3** (1)

PHYS 141 - Physics I-C Lab **Credits: 1** (1)

PHYS 142 - Physics II-C Lab **Credits: 1** (1)

PHYS 331 - Modern Physics **Credits: 3**

PHYS 345 - Optics **Credits: 3**

PHYS 441 - Classical Mechanics **Credits: 3**

PHYS 451 - Electricity and Magnetism **Credits: 3**

Additional Required Physics Courses:

(2)

PHYS 231 - Electronics **Credits: 4**

PHYS 342 - Thermal and Statistical Physics **Credits: 3**

PHYS 350 - Intermediate Experimental Physics I **Credits: 3**

PHYS 355 - Computer Interfacing **Credits:** 3
PHYS 401 - Theoretical Physics **Credits:** 3
PHYS 461 - Quantum Mechanics I **Credits:** 3
PHYS 472 - Nuclear Physics **Credits:** 3
or
PHYS 490

Controlled Electives: 6-8

As required per engineering program:

Chemical Engineering:

CHEM 231 - Organic Chemistry I **Credits:** 4
CHEM 332 - Organic Chemistry II **Credits:** 4

Civil Engineering:

MATH 216 - Probability and Statistics for Natural Sciences **Credits:** 3
Technical elective **Credits:** 3-4

Electrical Engineering:

MATH 216 - Probability and Statistics for Natural Sciences **Credits:** 3
Technical elective **Credits:** 3-4

Industrial Engineering:

MATH 216 - Probability and Statistics for Natural Sciences **Credits:** 3
Technical elective **Credits:** 3-4

Materials Science and Engineering:

CHEM 231 - Organic Chemistry I **Credits:** 4
CHEM 332 - Organic Chemistry II **Credits:** 4

Mechanical Engineering:

Technical electives **Credits:** 6-8

Other Requirements: 24-30

CHEM 111 - General Chemistry I **Credits:** 4
CHEM 112 - General Chemistry II **Credits:** 4
COSC 110 - Problem Solving and Structured Programming **Credits:** 3
COSC 343 - Introduction to Numerical Methods **Credits:** 3
MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits:** 3
MATH 341 - Differential Equations **Credits:** 3
MATH 342 - Advanced Mathematics for Applications **Credits:** 4

Foreign Language Intermediate Level: 0-6

(3)

Free Electives: 4-12

(If no automatic transfer into the University of Pittsburgh)

Special Requirements:

Two years at University of Pittsburgh School of Engineering (4)

Total Degree Requirements: 120

(1) Credits are counted in the Liberal Studies natural science requirement.

(2) Some of these courses may be taken at the University of Pittsburgh.

(3) Six credits of computer programming will substitute for the foreign language requirement: COSC 110, COSC 210, or higher-level computer science courses (COSC 343 recommended), with department permission.

(4) A 3.0 cumulative GPA is required for transfer to the University of Pittsburgh. Students transferring to University of Pittsburgh do not need a second writing-intensive class. Students need at most 64 additional credits from the University of Pittsburgh to receive the engineering degree.

(#) See advisory paragraph "Timely Completion of Degree Requirements" in the section on Requirements for Graduation. Students earn two degrees, hence the high credit count.

Pre-medical Track, Biology, BS

Liberal Studies: 45

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 121 - Calculus I for Natural and Social Sciences **Credits:** 4

Natural Science:

CHEM 111 - General Chemistry I **Credits:** 4

CHEM 112 - General Chemistry II **Credits:** 4

Social Science:

PSYC 101 - General Psychology **Credits:** 3

SOC 151 - Principles of Sociology **Credits:** 3

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits:** 3 (1)

Liberal Studies Elective: 3

MATH 216 - Probability and Statistics for Natural Sciences **Credits:** 3

or

Major: 44-45

Required Core Courses:

- BIOL 201 - Principles of Ecology and Evolution **Credits:** 4
- BIOL 202 - Principles of Cell and Molecular Biology **Credits:** 4
- BIOL 203 - Principles of Genetics and Development **Credits:** 4

Required Biology Courses:

- BIOL 240 - Human Physiology **Credits:** 4
- BIOL 241 - Introductory Medical Microbiology **Credits:** 4
- BIOL 331 - Developmental Biology **Credits:** 3
- BIOL 402 - Advanced Human Anatomy **Credits:** 4

Controlled Biology Electives: 14

(2,3)

- BIOL 105 - Cell Biology **Credits:** 3
 - BIOL 200 - Medical Terminology **Credits:** 2
 - BIOL 221 - Environmental Health and Protection **Credits:** 4
 - BIOL 300 - Genetics in Medicine and Nutrition **Credits:** 3
 - BIOL 301 - Fundamentals of Epidemiology **Credits:** 3
 - BIOL 310 - Applied Entomology and Zoonoses **Credits:** 3
 - BIOL 323 - Introduction to Toxicology and Risk Assessment **Credits:** 3
 - BIOL 342 - Comparative Vertebrate Anatomy **Credits:** 3
 - BIOL 352 - Comparative Animal Physiology **Credits:** 3
 - BIOL 364 - Immunology **Credits:** 3
 - BIOL 405 - The Biology of the Cell - Critical Thinking **Credits:** 2
 - BIOL 409 - Pharmacology Principles and Applications **Credits:** 3
 - BIOL 410 - Molecular Biology Topics **Credits:** 3
 - BIOL 420 - Entomology Principles and Practice **Credits:** 3
 - BIOL 430 - Gene Editing Tools in Medicine and Biotechnology **Credits:** 3
 - BIOL 455 - Animal Behavior **Credits:** 3
 - BIOL 456 - Ecological Toxicology **Credits:** 3
 - BIOL 462 - Vertebrate Endocrinology **Credits:** 3
 - BIOL 466 - Principles of Virology **Credits:** 3
 - BIOL 469 - Circadian Rhythms and Sleep **Credits:** 3
 - BIOL 477 - Neurobiology **Credits:** 3
 - BIOL 478 - Mycology and Plant Pathology **Credits:** 3
 - BIOL 479 - Neurobiology of Addiction **Credits:** 3
 - BIOL 480 - Biology Seminar **Credits:** 1
 - BIOL 481 - Special Topics **Credits:** 1-3
 - BIOL 482 - Independent Study **Credits:** 1-3
 - BIOL 483 - Honors Thesis/Independent Study **Credits:** 1-6
 - BIOL 484 - Honors Seminar **Credits:** 2
 - BIOL 493 - Biology Internship **Credits:** 3-12
- other biology major courses by permission of advisor and department chair

Controlled Electives: 3-4cr

Any BIOL course at 300 level or above; or CHEM 332 or BIOC 311 or BIOC 402 or BIOC 412

Ancillary Science Requirements: 15-16

CHEM 231 - Organic Chemistry I **Credits: 4**

CHEM 351 - Biochemistry **Credits: 4**

or

BIOC 301 - Foundations of Biochemistry **Credits: 3**

PHYS 111 - Physics I Lecture **Credits: 3**

PHYS 121 - Physics I Lab **Credits: 1**

PHYS 112 - Physics II Lecture **Credits: 3**

PHYS 122 - Physics II Lab **Credits: 1**

Other Requirements:

Exit survey for assessment purposes

Free Electives: 15

(4,5)

Total Degree Requirements: 120

- (1) If students enroll for SOC 151, then third Social Science course should also fulfill the GMA requirement.
- (2) A minimum of 12 credits must be in courses at 300-400 level.
- (3) No more than 4 credits can come from 100-level courses. No more than 6 credits total from independent study, special Topics, or internship applies to major.
- (4) Free electives may be used towards an animal behavior, chemistry, child and adult advocacy studies (CAAST), environmental microbiology, forensic biosciences, global health, neurobiology, psychology, or other minors of interest.
- (5) Excluding prerequisite, cognate, liberal studies, college core courses, no more than two major's courses can be shared between a major and minor.

Pre-medical Track, Chemistry, BS

The Pre-medical and Pre-pharmacy Tracks of the BS degree allow students to take all courses required for entrance into their intended professional health program, and gives them the flexibility to tailor their program to meet their individual needs. Students in these tracks retain the option of: (a) attending medical or pharmacy school, (b) attending graduate school in chemistry, biochemistry, pharmacology, or a variety of medically-related PhD programs, (c) employment in the chemistry or pharmaceutical industry. Additionally, the flexibility of these tracks allows students to change the focus of their degree program during their undergraduate experience.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3 (1)**

Natural Science:

PHYS 111 - Physics I Lecture **Credits: 3**

PHYS 121 - Physics I Lab **Credits: 1**

PHYS 112 - Physics II Lecture **Credits: 3**

PHYS 122 - Physics II Lab **Credits: 1**

or

PHYS 131 - Physics I-C Lecture **Credits: 3**

PHYS 141 - Physics I-C Lab **Credits: 1**

PHYS 132 - Physics II-C Lecture **Credits: 3**

PHYS 142 - Physics II-C Lab **Credits: 1**

Philosophy or Religious Studies:

PHIL 122 - Contemporary Moral Issues **Credits: 3**

or

PHIL 130 - Introduction to Biomedical Ethics **Credits: 3**

Social Science:

(2, 3)

PSYC 101 - General Psychology **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

or

ANTH 110 - Contemporary Anthropology **Credits: 3**

or

ANTH 211 - Cultural Anthropology **Credits: 3**

Liberal Studies Elective: 3

MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3 (1)**

No course with CHEM prefix

Major: 49

Required Courses:

CHEM 111 - General Chemistry I **Credits: 4**

or

CHEM 113 - Advanced General Chemistry I **Credits: 4**

CHEM 112 - General Chemistry II **Credits: 4**

or

CHEM 114 - Advanced General Chemistry II **Credits: 4**

CHEM 314 - Inorganic Chemistry **Credits: 4**

CHEM 231 - Organic Chemistry I **Credits: 4**

CHEM 332 - Organic Chemistry II **Credits: 4**

CHEM 290 - Chemistry Seminar I **Credits: 1**

CHEM 325 - Analytical Chemistry I **Credits: 4**

CHEM 341 - Physical Chemistry I **Credits: 4**

CHEM 390 - Chemistry Seminar II **Credits: 1**

CHEM 490 - Chemistry Seminar III **Credits: 1**

CHEM 498 - Problems in Chemistry **Credits: 1-2**

BIOC 301 - Foundations of Biochemistry **Credits: 3**
BIOC 402 - Advanced Biochemistry **Credits: 3**

Controlled Electives:

At least 11 additional credits from the following: (2, 3, 4)

BIOC 311 - Biochemistry Laboratory I **Credits: 1**
BIOC 412 - Advanced Biochemistry Laboratory **Credits: 1**
BIOC 481 - Special Topics in Biochemistry **Credits: 1-3**
BIOL 150 - Human Anatomy **Credits: 4**
BIOL 240 - Human Physiology **Credits: 4**
BIOL 241 - Introductory Medical Microbiology **Credits: 4**
BIOL 250 - Principles of Microbiology **Credits: 4**
BIOL 331 - Developmental Biology **Credits: 3**
CHEM 326 - Analytical Chemistry II **Credits: 4**
CHEM 431 - Organic Molecular Structure Determination **Credits: 3**
CHEM 442 - Advanced Physical Chemistry **Credits: 3**
CHEM 343 - Physical Chemistry Laboratory I **Credits: 1**
CHEM 444 - Advanced Physical Chemistry Laboratory **Credits: 1**
CHEM 411 - Advanced Inorganic Chemistry **Credits: 3**
CHEM 481 - Special Topics **Credits: 1-3**
MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits: 3**

Other Requirements: 11

BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**
BIOL 203 - Principles of Genetics and Development **Credits: 4**
MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**

Free Electives: 16

Total Degree Requirements: 120

- (1) For students transferring into the program, MATH 121 and MATH 122 may be substituted for MATH 125 and MATH 126, respectively.
- (2) The application requirements of specific schools of medicine may result in the need to take additional courses. Students should be aware of the requirements at each program in which they are interested, and plan to take courses accordingly to meet these requirements.
- (3) Students enrolled at an accredited school of medicine after three years at IUP may count the following toward the requirements for the Bachelor of Science–Chemistry/Pre-medical Track: 3cr of Liberal Studies social science; 11cr of required CHEM courses (see below); 13cr of free electives (total 27cr). Upon completing the first year of medical school, students electing this option are not required to take CHEM 314, CHEM 325, and CHEM 341. If these CHEM courses are taken, they may be counted toward the controlled elective requirement.
- (4) To qualify for an ACS-certified degree in chemistry, students must take BIOC 311, CHEM 343, and two courses from the following list:
 - BIOC 481 - Special Topics in Biochemistry **Credits: 1-3**
 - CHEM 326 - Analytical Chemistry II **Credits: 4**
 - CHEM 431 - Organic Molecular Structure Determination **Credits: 3**
 - CHEM 442 - Advanced Physical Chemistry **Credits: 3**

 - CHEM 411 - Advanced Inorganic Chemistry **Credits: 3**
 - or
 - CHEM 481 - Special Topics **Credits: 1-3**

Pre-optometry Track, Natural Science, BS

Accelerated three-year Salus University program. A maximum of 30cr of work may be transferred after the first year at Salus. Upon completion of the first year of studies at Salus, a transcript from Salus is to be sent by the student to the dean of the College of Natural Sciences and Mathematics with a note requesting application materials for graduation.

Liberal Studies: 48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**

Natural Science:

CHEM 111 - General Chemistry I **Credits: 4**

CHEM 112 - General Chemistry II **Credits: 4**

Social Science:

ECON 101 - Basic Economics **Credits: 3**

PSYC 101 - General Psychology **Credits: 3**

Writing Intensive:

A second writing-intensive course is not required for three-year students who transfer to a professional school with an articulation agreement.

Liberal Studies Elective: 3

COSC 101 - Computer Literacy **Credits: 3**

No courses with SCI prefix

Major: 43

Required Courses:

BIOL 150 - Human Anatomy **Credits: 4**

BIOL 201 - Principles of Ecology and Evolution **Credits: 4**

BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**

BIOL 203 - Principles of Genetics and Development **Credits: 4**

BIOL 240 - Human Physiology **Credits: 4**

BIOL 241 - Introductory Medical Microbiology **Credits: 4**

CHEM 231 - Organic Chemistry I **Credits: 4**

CHEM 332 - Organic Chemistry II **Credits: 4**

or

CHEM 351 - Biochemistry **Credits: 4**

PHYS 111 - Physics I Lecture **Credits: 3**

PHYS 121 - Physics I Lab **Credits: 1**

PHYS 112 - Physics II Lecture **Credits: 3**

PHYS 122 - Physics II Lab **Credits: 1**

MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**

Other Requirements: 0-6

Foreign Language Intermediate Level

Free Electives: 23-29

(1)

Electives to meet minimum of 90 IUP cr and minimum of 24cr in Humanities and Social Sciences for admission to affiliated optometry school after three years at IUP

Maximum cr for work at affiliated optometry school **Credits:** 30

Total Degree Requirements: 120

(1) Student is to work with his/her advisor to select appropriate free electives for professional school. Neurobiology and optics are highly recommended courses.

Pre-pharmacy Track, Chemistry, BS

The Pre-medical and Pre-pharmacy Tracks of the BS degree allow students to take all courses required for entrance into their intended professional health program, and gives them the flexibility to tailor their program to meet their individual needs. Students in these tracks retain the option of: (a) attending medical or pharmacy school, (b) attending graduate school in chemistry, biochemistry, pharmacology, or a variety of medically-related PhD programs, (c) employment in the chemistry or pharmaceutical industry. Additionally, the flexibility of these tracks allows students to change the focus of their degree program during their undergraduate experience.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits:** 3 (1)

Natural Science:

PHYS 111 - Physics I Lecture **Credits:** 3

PHYS 121 - Physics I Lab **Credits:** 1

PHYS 112 - Physics II Lecture **Credits:** 3

PHYS 122 - Physics II Lab **Credits:** 1

or

PHYS 131 - Physics I-C Lecture **Credits:** 3

PHYS 141 - Physics I-C Lab **Credits:** 1

PHYS 132 - Physics II-C Lecture **Credits:** 3

PHYS 142 - Physics II-C Lab **Credits:** 1

Philosophy or Religious Studies:

PHIL 122 - Contemporary Moral Issues **Credits:** 3

or

PHIL 130 - Introduction to Biomedical Ethics **Credits:** 3

Social Science:

PSYC 101 - General Psychology **Credits: 3**
ECON 101 - Basic Economics **Credits: 3 (2, 3)**
or
ECON 121 - Principles of Macroeconomics **Credits: 3 (2, 3)**

Liberal Studies Elective: 3

MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3 (1)**
No course with CHEM prefix

Major: 49

Required Courses:

CHEM 111 - General Chemistry I **Credits: 4**
or
CHEM 113 - Advanced General Chemistry I **Credits: 4**
CHEM 112 - General Chemistry II **Credits: 4**
or
CHEM 114 - Advanced General Chemistry II **Credits: 4**
CHEM 314 - Inorganic Chemistry **Credits: 4 (3)**
CHEM 231 - Organic Chemistry I **Credits: 4**
CHEM 332 - Organic Chemistry II **Credits: 4**
CHEM 290 - Chemistry Seminar I **Credits: 1**
CHEM 325 - Analytical Chemistry I **Credits: 4 (3)**
CHEM 341 - Physical Chemistry I **Credits: 4 (3)**
CHEM 390 - Chemistry Seminar II **Credits: 1**
CHEM 490 - Chemistry Seminar III **Credits: 1**

Controlled Electives: 19

(2, 3, 4)

At least 19cr, consisting of:

BIOC 301 - Foundations of Biochemistry **Credits: 3**
and
BIOC 402 - Advanced Biochemistry **Credits: 3**

or

CHEM 351 - Biochemistry **Credits: 4**

Courses from the Following:

BCOM 321 - Business and Interpersonal Communications **Credits: 3**
or
ENGL 310 - Public Speaking **Credits: 3**
BIOC 311 - Biochemistry Laboratory I **Credits: 1**
BIOC 412 - Advanced Biochemistry Laboratory **Credits: 1**
BIOC 481 - Special Topics in Biochemistry **Credits: 1-3**
BIOL 150 - Human Anatomy **Credits: 4**

BIOL 240 - Human Physiology **Credits:** 4
BIOL 241 - Introductory Medical Microbiology **Credits:** 4
BIOL 250 - Principles of Microbiology **Credits:** 4
CHEM 326 - Analytical Chemistry II **Credits:** 4
CHEM 431 - Organic Molecular Structure Determination **Credits:** 3
CHEM 442 - Advanced Physical Chemistry **Credits:** 3
CHEM 343 - Physical Chemistry Laboratory I **Credits:** 1
CHEM 444 - Advanced Physical Chemistry Laboratory **Credits:** 1
CHEM 411 - Advanced Inorganic Chemistry **Credits:** 3
CHEM 481 - Special Topics **Credits:** 1-3
CHEM 498 - Problems in Chemistry **Credits:** 1-2
MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits:** 3

Other Requirements: 11

BIOL 202 - Principles of Cell and Molecular Biology **Credits:** 4
BIOL 203 - Principles of Genetics and Development **Credits:** 4
MATH 216 - Probability and Statistics for Natural Sciences **Credits:** 3

Free Electives: 16

(2, 3)

Total Degree Requirements: 120

(1) For students transferring into the program, MATH 121 and MATH 122 may be substituted for MATH 125 and MATH 126, respectively.

(2) The application requirements of specific schools of pharmacy may result in the need to take additional courses. Students should be aware of the requirements at each program in which they are interested, and plan to take courses accordingly to meet these requirements.

(3) Students enrolled at an accredited school of pharmacy after three years at IUP may count the following toward the requirements for the Bachelor of Science–Chemistry/Pre-pharmacy Track: 3cr of Liberal Studies social science; 11cr of required CHEM courses (see below); 13cr of free electives (total 27cr). Upon completing the first year of pharmacy school, students electing this option are not required to take CHEM 314, CHEM 325, and CHEM 341. If these CHEM courses are taken, they may be counted toward the controlled elective requirement.

(4) To qualify for an ACS-certified degree in chemistry, students must take BIOC 311 and CHEM 498. Additionally, they must take three lecture courses and one lab course from the following list:

BIOC 402 - Advanced Biochemistry **Credits:** 3
BIOC 412 - Advanced Biochemistry Laboratory **Credits:** 1
BIOC 481 - Special Topics in Biochemistry **Credits:** 1-3
CHEM 326 - Analytical Chemistry II **Credits:** 4 (Counts as both a lecture and a lab course)
CHEM 431 - Organic Molecular Structure Determination **Credits:** 3
CHEM 442 - Advanced Physical Chemistry **Credits:** 3
CHEM 343 - Physical Chemistry Laboratory I **Credits:** 1
CHEM 411 - Advanced Inorganic Chemistry **Credits:** 3 (Counts as both a lecture and a lab course)
CHEM 481 - Special Topics **Credits:** 1-3

Pre-pharmacy Track, Natural Science, BS

Accelerated three-year Shenandoah University School of Pharmacy (SUSP) or Lake Erie College of Osteopathic Medicine School of Pharmacy (LECOMP) program. A maximum of 30cr may be transferred after first year at SUSP or LECOMP. Upon completion of the first year of studies at either SUSP or LECOMP, a transcript from SUSP or LECOMP is to be sent by the student to the dean of the College of Natural Sciences and Mathematics at IUP with a note requesting application materials for graduation.

Liberal Studies: 48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**

Natural Science:

CHEM 111 - General Chemistry I **Credits: 4**

CHEM 112 - General Chemistry II **Credits: 4**

Social Science:

ECON 101 - Basic Economics **Credits: 3**

PSYC 101 - General Psychology **Credits: 3**

Writing Intensive:

A second writing-intensive course is not required for three-year students who transfer to a professional school with an articulation agreement.

Liberal Studies Elective: 3

COSC 101 - Computer Literacy **Credits: 3**

No courses with SCI prefix

Major: 43

Required Courses:

BIOL 150 - Human Anatomy **Credits: 4**

BIOL 201 - Principles of Ecology and Evolution **Credits: 4**

BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**

BIOL 203 - Principles of Genetics and Development **Credits: 4**

BIOL 240 - Human Physiology **Credits: 4**

BIOL 241 - Introductory Medical Microbiology **Credits: 4**

CHEM 231 - Organic Chemistry I **Credits: 4**

CHEM 332 - Organic Chemistry II **Credits: 4**

or

CHEM 351 - Biochemistry **Credits: 4**

PHYS 111 - Physics I Lecture **Credits: 3**

PHYS 121 - Physics I Lab **Credits: 1**

PHYS 112 - Physics II Lecture **Credits: 3**

PHYS 122 - Physics II Lab **Credits: 1**

MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**

Other Requirements: 0-6

Foreign Language Intermediate Level

Free Electives: 23-29

(1)

Electives to meet minimum of 90 IUP cr and minimum of 24cr in Humanities and Social Sciences for admission to affiliated pharmacy school after three years at IUP

Maximum cr for work at affiliated pharmacy school **Credits:** 30

Total Degree Requirements: 120

(1) Student is to work with his/her advisor to select appropriate free electives for professional school. Additional courses in chemistry and COMM 101 are recommended.

Pre-physical Therapy, Natural Science, BS Track

Accelerated three-year Gannon University School of Physical Therapy program. A maximum of 30cr of work may be transferred after the first year at Gannon University School of Physical Therapy. Upon completion of the first year of studies at one of the physical therapy schools, a transcript from that school is to be sent by the student to the dean of the College of Natural Sciences and Mathematics with a note requesting application materials for graduation. Articulation agreement with Chatham University School of Physical Therapy requires a BS from IUP.

Liberal Studies: 48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 121 - Calculus I for Natural and Social Sciences **Credits:** 4

Natural Science:

CHEM 111 - General Chemistry I **Credits:** 4

CHEM 112 - General Chemistry II **Credits:** 4

Social Science:

ECON 101 - Basic Economics **Credits:** 3

PSYC 101 - General Psychology **Credits:** 3

Writing Intensive:

A second writing-intensive course is not required for three-year students who transfer to a professional school with an articulation agreement.

Liberal Studies Elective: 3

COSC 101 - Computer Literacy **Credits:** 3

No courses with SCI prefix

Major: 43

Required Courses:

BIOL 150 - Human Anatomy **Credits: 4**
BIOL 201 - Principles of Ecology and Evolution **Credits: 4**
BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**
BIOL 203 - Principles of Genetics and Development **Credits: 4**
BIOL 240 - Human Physiology **Credits: 4**
BIOL 241 - Introductory Medical Microbiology **Credits: 4**
CHEM 231 - Organic Chemistry I **Credits: 4**

CHEM 332 - Organic Chemistry II **Credits: 4**
or
CHEM 351 - Biochemistry **Credits: 4**

PHYS 111 - Physics I Lecture **Credits: 3**
PHYS 112 - Physics II Lecture **Credits: 3**
PHYS 121 - Physics I Lab **Credits: 1**
PHYS 122 - Physics II Lab **Credits: 1**
MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**

Other Requirements: 0-6

Foreign Language Intermediate Level

Free Electives: 23-29

(1)

Electives to meet minimum of 90 IUP cr and minimum of 24cr in Humanities and Social Sciences for admission to affiliated physical therapy school after three years at IUP
Maximum cr for work at affiliated physical therapy school **Credits: 30**

Total Degree Requirements: 120

(1) Student is to work with his/her advisor to select appropriate free electives for professional school. Neurobiology, biomechanics, and athletic training are highly recommended.

Pre-physician Assistant Track, Natural Science, BS

Accelerated three-year Salus University program

Liberal Studies: 45

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**

Natural Science:

CHEM 111 - General Chemistry I **Credits: 4**
CHEM 112 - General Chemistry II **Credits: 4**

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Writing Intensive:

A second writing-intensive course is not required for three-year students who transfer to a professional school with an articulation agreement.

Liberal Studies Elective: 3

COSC 101 - Computer Literacy **Credits: 3**

or

IFMG 101 - Computer Literacy **Credits: 3**

No courses with SCI prefix

Major: 49

Required Courses:

BIOL 200 - Medical Terminology **Credits: 2**

BIOL 201 - Principles of Ecology and Evolution **Credits: 4**

BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**

BIOL 203 - Principles of Genetics and Development **Credits: 4**

BIOL 240 - Human Physiology **Credits: 4**

BIOL 241 - Introductory Medical Microbiology **Credits: 4**

BIOL 402 - Advanced Human Anatomy **Credits: 4**

CHEM 231 - Organic Chemistry I **Credits: 4**

CHEM 332 - Organic Chemistry II **Credits: 4**

CHEM 351 - Biochemistry **Credits: 4**

MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**

or

MATH 217 - Probability and Statistics **Credits: 3**

PHYS 111 - Physics I Lecture **Credits: 3**

PHYS 121 - Physics I Lab **Credits: 1**

PHYS 112 - Physics II Lecture **Credits: 3**

PHYS 122 - Physics II Lab **Credits: 1**

Other Requirements: 0-4

Foreign Language through Intermediate Level

Free Electives: 22-26

(1)

Total Degree Requirements: 120

(1) The student, under consultation with her/his advisor, should select free electives courses that are appropriate for the student's targeted post-graduate PA programs.

Pre-podiatry Track, Natural Science, BS

Accelerated three-year Temple University School of Podiatry program. A maximum of 30cr may be transferred after the first year at Temple University School of Podiatry. Upon completion of the first year of studies at Temple University School of Podiatry, a transcript from Temple University is to be sent by the student to the dean of the College of Natural Sciences and Mathematics at IUP with a note requesting application materials for graduation.

Liberal Studies: 48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**

Natural Science:

CHEM 111 - General Chemistry I **Credits: 4**

CHEM 112 - General Chemistry II **Credits: 4**

Social Science:

ECON 101 - Basic Economics **Credits: 3**

PSYC 101 - General Psychology **Credits: 3**

Writing Intensive:

A second writing-intensive course is not required for three-year students who transfer to a professional school with an articulation agreement.

Liberal Studies Elective: 3

COSC 101 - Computer Literacy **Credits: 3**

No courses with SCI prefix

Major: 43

Required Courses:

BIOL 150 - Human Anatomy **Credits: 4**

BIOL 201 - Principles of Ecology and Evolution **Credits: 4**

BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**

BIOL 203 - Principles of Genetics and Development **Credits: 4**

BIOL 240 - Human Physiology **Credits: 4**

BIOL 241 - Introductory Medical Microbiology **Credits: 4**

CHEM 231 - Organic Chemistry I **Credits: 4**

CHEM 332 - Organic Chemistry II **Credits: 4**

or

CHEM 351 - Biochemistry **Credits: 4**

PHYS 111 - Physics I Lecture **Credits: 3**

PHYS 121 - Physics I Lab **Credits: 1**

PHYS 112 - Physics II Lecture **Credits: 3**

PHYS 122 - Physics II Lab **Credits:** 1

MATH 216 - Probability and Statistics for Natural Sciences **Credits:** 3

Other Requirements: 0-6

Foreign Language Intermediate Level

Free Electives: 23-29

(1)

Electives to meet minimum of 90 IUP cr and minimum of 24cr in Humanities and Social Sciences for admission to affiliated podiatry school after three years at IUP

Maximum cr for work at affiliated podiatry school **Credits:** 30

Total Degree Requirements: 120

(1) Student is to work with his/her advisor to select appropriate free electives for professional school. Additional courses in biology are recommended.

Pre-veterinary Track, Biology, BS

Liberal Studies: 45

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 121 - Calculus I for Natural and Social Sciences **Credits:** 4

Natural Science:

CHEM 111 - General Chemistry I **Credits:** 4 and

CHEM 112 - General Chemistry II **Credits:** 4

Social Science:

one course should also fulfill GMA requirement

Liberal Studies Elective: 3

MATH 216 - Probability and Statistics for Natural Sciences **Credits:** 3

or

MATH 217 - Probability and Statistics **Credits:** 3

Major: 44-45

Required Core Courses:

BIOL 201 - Principles of Ecology and Evolution **Credits: 4**
BIOL 202 - Principles of Cell and Molecular Biology **Credits: 4**
BIOL 203 - Principles of Genetics and Development **Credits: 4**

Required Biology Courses:

BIOL 220 - General Zoology **Credits: 3**
BIOL 241 - Introductory Medical Microbiology **Credits: 4**
BIOL 331 - Developmental Biology **Credits: 3**
BIOL 342 - Comparative Vertebrate Anatomy **Credits: 3**
BIOL 352 - Comparative Animal Physiology **Credits: 3**

Controlled Biology Electives: 13

Biology major courses only (1,2)

Controlled Electives: 3-4

Any BIOL course at 300 level or above; or
CHEM 332 - Organic Chemistry II **Credits: 4**
or
BIOC 311 - Biochemistry Laboratory I **Credits: 1**
or
BIOC 402 - Advanced Biochemistry **Credits: 3**
or
BIOC 412 - Advanced Biochemistry Laboratory **Credits: 1**

Ancillary Science Requirements: 15-16

CHEM 231 - Organic Chemistry I **Credits: 4**

CHEM 351 - Biochemistry **Credits: 4**
or
BIOC 301 - Foundations of Biochemistry **Credits: 3**

PHYS 111 - Physics I Lecture **Credits: 3**
PHYS 121 - Physics I Lab **Credits: 1**
PHYS 112 - Physics II Lecture **Credits: 3**
PHYS 122 - Physics II Lab **Credits: 1**

Other Requirements:

Exit survey for assessment purposes (3)

Free Electives: 15

(4)

Total Degree Requirements: 120

(1) No more than 6cr total from Independent Study, Special Topics, or Internship applies to major; excess applied as free electives.

(2) No more than 4crs can come from 100-level courses. Excluding prerequisite, cognate, liberal studies, college core courses, no more than two major's courses can be shared between a major and minor.

(3) With input from academic advisor, completion of at least four CITI modules in animal biology.

(4) Free electives may be used towards a Biology department Minor such as Animal Behavior, Biomedical Science, Environmental Microbiology, Forensic Biosciences, Neurobiology, Wildlife and Conservation Biology, or other minors of interest.

Respiratory Care, BS

Subbarao Elapavaluru, MD, Medical Director *

The bachelor of science degree program in respiratory care prepares the graduate for a career as a registered respiratory care practitioner. Respiratory care practitioners evaluate, treat, and care for people with breathing problems. They assist physicians in the evaluation and treatment of heart and lung disorders. Respiratory care practitioners are experts in the therapeutic use of medical gases, oxygen administration, pulmonary resuscitation, and artificial airways. They are employed in hospitals, extended care facilities, clinics, rehabilitation centers, physicians' offices, educational programs, home care services, as well as, national and international medical device companies.

The program is accredited by the Commission on Accreditation for Respiratory Care (CoARC). The program consists of two academic years of pre-clinical studies (65 credits) on the Indiana campus and two academic years (59 credits) of clinical study at the IUP Northpointe Regional Campus. Students are expected to earn a GPA of at least 2.25 in the required Natural Sciences and Mathematics courses (includes "C" or higher in BIOL 150 and BIOL 240), and an overall GPA of at least 2.0 to be considered for Fall semester admission into the clinical years in respiratory care. However, since admission to the clinical years is competitive, IUP cannot guarantee progression.

Respiratory Care majors must earn a minimum grade of "C" in all required RESP 300 level and 400 level courses to progress. A grade of "D" in a RESP course may hinder progression to the next level of required courses when mastery of the content is essential for success and certification.

Upon graduation, graduates are eligible for certification (CRT) and registration (RRT) in respiratory care. The granting of the degree is not contingent upon passing the credential examinations. Graduates are prepared for graduate degrees that may lead to careers in administration, education, and medicine.

This program is also available to Certified Respiratory Therapists (CRTs) who are graduates of a USDE-accredited, Associate degree respiratory care program. Based upon successful completion and prior approval to transfer academic credits from another respiratory care program, CRT students may be exempt from the RESP 100 and 300 level courses (29 credits). Students who are A.S., CRT must complete 27 credits from the 400 level RESP courses (see list below), which are available on a full-time or part-time basis. There is potential for additional course exemptions that meet prior approval for transfer (liberal studies, math, science); several of these courses may be available online. CRT candidates must provide proof of a valid NBRC credential and a current respiratory license for the state of Pennsylvania.

Detailed information regarding requirements such as health screening, liability insurance, legal clearance, and professional uniforms is available in the Nursing and Allied Health Department office and on the IUP website.

Criteria for change of major and applications are available online through the IUP Department of Nursing and Allied Health Professions.

* pending final paperwork to appoint medical director.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 105 - College Algebra **Credits:** 3 or higher level

Natural Science:

CHEM 101 - College Chemistry I **Credits:** 4

CHEM 102 - College Chemistry II **Credits: 4**

Social Science:

PSYC 101 - General Psychology **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

Global and multicultural awareness course

Writing Intensive:

Not required

Liberal Studies Elective: 3

No courses with RESP prefix

Major: 56

Required Courses:

RESP 101 - The Profession of Respiratory Care **Credits: 1**

RESP 326 - Respiratory Care Clinical Practice I **Credits: 3**

RESP 327 - Pharmacology **Credits: 3**

RESP 328 - Applied Concepts in Respiratory Care **Credits: 3**

RESP 329 - Respiratory Care Equipment **Credits: 4**

RESP 333 - Respiratory Care Clinical Practice II **Credits: 3**

RESP 334 - Respiratory Care Instrumentation and Application **Credits: 4**

RESP 335 - Patient Care and Emergency Skills **Credits: 4**

RESP 336 - Cardiopulmonary Evaluation and Clinical Correlation **Credits: 4**

RESP 425 - Clinical Case Studies **Credits: 3**

RESP 426 - Respiratory Care Clinical Practice III **Credits: 4**

RESP 429 - Respiratory Care Leadership **Credits: 3**

RESP 430 - Cardiopulmonary Diagnostics **Credits: 3**

RESP 432 - Neonatal and Pediatric Respiratory Care **Credits: 3**

RESP 433 - Respiratory Care Clinical Practice IV **Credits: 4**

RESP 435 - Respiratory Care Across the Continuum **Credits: 3**

RESP 441 - Respiratory Care Professional I **Credits: 2**

RESP 451 - Respiratory Care Professional II **Credits: 2**

Other Requirements: 15

Science Courses:

BIOL 150 - Human Anatomy **Credits: 4**

BIOL 240 - Human Physiology **Credits: 4**

BIOL 241 - Introductory Medical Microbiology **Credits: 4**

PHYS 151 - Medical Physics Lecture **Credits: 3**

Free Electives: 5

Total Degree Requirements: 120

RESP 300- and 400- level courses are completed at IUP Northpointe Regional Campus.

Safety, Health, and Environmental Applied Sciences, BS

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 105 - College Algebra **Credits: 3**

Natural Science:

CHEM 101 - College Chemistry I **Credits: 4**

CHEM 102 - College Chemistry II **Credits: 4**

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Global and multicultural awareness course

Liberal Studies Elective: 3

MATH 217 - Probability and Statistics **Credits: 3**

Major: 52-58

Required Courses:

SAFE 101 - Introduction to Occupational Safety and Health **Credits: 3**

SAFE 111 - Principles of Safety I—General Industry **Credits: 3**

SAFE 211 - Principles of Safety II—Construction Industry **Credits: 3**

SAFE 212 - Hazard Prevention Management I **Credits: 3**

SAFE 215 - Safety, Health, and Environmental Communications **Credits: 3**

SAFE 220 - Hazardous Materials and Emergency Management **Credits: 3**

SAFE 310 - Environmental Safety and Health Regulations and Sustainability **Credits: 3**

SAFE 311 - Fire Protection **Credits: 3**

SAFE 330 - Recognition, Evaluation, and Control of Occupational Health Hazards I **Credits: 4**

SAFE 331 - Fundamentals of Industrial Hygiene **Credits: 3**

SAFE 335 - Industrial and Environmental Stressors **Credits: 2**

SAFE 345 - Process and Systems Safety **Credits: 3**

SAFE 346 - Fundamentals of Ergonomics **Credits: 3**

SAFE 347 - Ergonomics **Credits: 3**

SAFE 361 - Air and Water Pollution **Credits: 2**

SAFE 412 - Hazard Prevention Management II **Credits: 3**

SAFE 430 - Recognition, Evaluation, and Control of Occupational Health Hazards II **Credits: 4**

SAFE 435 - Ethics and Professionalism **Credits: 1**

SAFE 488 - Internship **Credits: 12**

or
SAFE 493 - Internship **Credits: 6**

Other Requirements: 18

Additional Science and Mathematics:

BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**

or

BIOL 155 - Human Physiology and Anatomy **Credits: 4**

PHYS 111 - Physics I Lecture **Credits: 3**

PHYS 112 - Physics II Lecture **Credits: 3**

PHYS 121 - Physics I Lab **Credits: 1**

PHYS 122 - Physics II Lab **Credits: 1**

Business Electives:

Two 3cr courses from the following:

ACCT 200 - Foundations of Accounting **Credits: 3**

MGMT 300 - Human Resource Management **Credits: 3**

MGMT 310 - Principles of Management **Credits: 3**

MGMT 311 - Human Behavior in Organizations **Credits: 3**

MGMT 434 - Industrial Quality: Statistical Tools and Management **Credits: 3**

Free Electives: 0-6

Total Degree Requirements: 120

Software Engineering Track, Computer Science, BS

IUP's computer science programs share a curricular core covering fundamental concepts, programming, problem solving, data structures, algorithms, software engineering, database, and seminars on technical topics and the profession. The department focuses on providing a broad foundation to create agile graduates who can adapt to the rapidly changing trends in the computer science field. Upper-level courses are designed to provide depth of theory and build career skills. Every student in the B.S. in Software Engineering track also completes a minor (or double major) in a complementary field. The program trains students to analyze complex computing problems and to identify solutions by applying software engineering principles and by leveraging their skills from other disciplines. The curriculum includes courses held in computer classrooms and offers hands-on learning that blends theory with supervised practice. The track prepares work-force ready graduates who function effectively as a team members or leaders while engaged in software engineering activities.

Students completing the program are prepared to work in computer-dependent areas of business, government, and industry. Recent graduates have started their careers with positions in programming and systems analysis, business applications, computer software development, scientific and applied mathematical programming, and other computer-related areas or have continued with graduate school.

Liberal Studies: 43-44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3 (1)**

Liberal Studies Elective: 3

MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**
No courses with COSC prefix

Major: 46

Required Courses:

COSC 105 - Fundamentals of Computer Science **Credits: 3**
COSC 110 - Problem Solving and Structured Programming **Credits: 3**
COSC 210 - Object-Oriented and GUI Programming **Credits: 3**
COSC 220 - Applied Computer Programming **Credits: 4**
COSC 300 - Computer Organization and Assembly Language **Credits: 3**
COSC 310 - Data Structures and Algorithms **Credits: 3**
COSC 319 - Software Engineering Concepts **Credits: 3**
COSC 341 - Introduction to Database Management Systems **Credits: 3**
COSC 365 - Web Architecture and Application Development **Credits: 3**
COSC 380 - Seminar on the Computer Profession and Ethics **Credits: 2**
COSC 480 - Seminar on Technical Topics **Credits: 1**

COSC 473 - Software Engineering Practice **Credits: 3**
or
COSC 493 - Internship in Computer Science **Credits: 6-12**

Controlled Electives:

9cr from the following: (3, 4, 5)

COSC 343 - Introduction to Numerical Methods **Credits: 3**
or
MATH 343 - Introduction to Numerical Methods **Credits: 3**

COSC 216 - Introduction to Cyber Security **Credits: 3**
or
COSC 356 - Network Security **Credits: 3**

COSC 345 - Computer Networks **Credits: 3**
COSC 355 - Computer Graphics **Credits: 3**
COSC 362 - Unix Systems **Credits: 3**
IFMG 455 - Business Data Mining **Credits: 3**

Upper-Level Electives:

3cr from the following: (5)

COSC 405 - Artificial Intelligence **Credits: 3**
COSC 410 - Computer Architecture **Credits: 3**
COSC 420 - Modern Programming Languages **Credits: 3**
COSC 424 - Compiler Construction **Credits: 3**
COSC 430 - Introduction to Systems Programming **Credits: 3**
COSC 460 – Theory of Computation **Credits: 3**
COSC 465 - Distributed Processing and Web Services **Credits: 3**

Other Requirements: 3

Additional Mathematics:

MATH 309 - Discrete Mathematics **Credits:** 3

Minor: 9-20

Complete a minor from one of the following areas:

Cyber Security **Credits:** 12-18

Any department in the Kopchick College of Natural Sciences and Mathematics (6) **Credits:** 9-20

Business **Credits:** 18

Economics **Credits:** 12-15

Communications Media **Credits:** 18

Geography or Regional Planning **Credits:** 18

Other minors or concentrations approved by the department chair

Free Electives: 7-19

Total Degree Requirements: 120

(1) MATH 125 can be substituted by MATH 121.

(2) COSC 493 may be selected after completion of sophomore year. **Note:** If a 6cr COSC 493 is taken, 3cr are applied toward COSC upper-level electives and COSC 473 is required. If a 12cr COSC 493 is taken, 3cr are applied toward COSC required courses and 3cr toward COSC upper-level electives.

(3) Upper-level electives may be counted as controlled electives. 3cr of Intermediate Level foreign language may be applied toward controlled electives.

(4) COSC 216 cannot be counted for major credit if a student does a Cyber Security minor.

(5) Controlled and upper level electives may not be applied toward more than one track in computer science.

(6) No more than six credits of overlap can be used for computer science majors and cyber security minor

Speech-Language Pathology and Audiology, BS

Completion of the sequence of courses in speech-language pathology and audiology serves as a preprofessional program for students planning to become practicing speech-language pathologists or audiologists. Students entering the undergraduate program should be aware of the following:

IUP is accredited by the Council on Academic Accreditation of the American Speech-Language-Hearing Association and qualifies a person for the Certificate of Clinical Competence from the American Speech- Language-Hearing Association and Pennsylvania State Licensure. National certification, state licensure, and PDE Educational Specialist Certification as a School Speech-Language Pathologist are available only to holders of the master's degree in speech-language pathology.

Students will need a minimum cumulative GPA greater than 3.5 to qualify for admission to most graduate schools.

Upon completion of a master's degree in speech-language pathology at IUP, students will be prepared to provide services in work settings such as hospitals, community clinics, public school and early intervention programs, and rehabilitation settings.

To be eligible to register for 300- and 400-level courses in the major, students must meet the junior standing requirement of a minimum overall cumulative GPA of 3.25 and verification by the academic advisor that the program's dispositions are met or exceeded. Students must also complete 25 hours of observation in speech-language pathology or audiology (depending upon career objectives) supervised by an IUP faculty member who holds a Certificate of Clinical Competence. These are completed through enrollment in SPLP 310 and SPLP 410.

Transfers, changes of major, and post-baccalaureate admissions into the undergraduate Speech-Language Pathology and Audiology program will be approved on a competitive basis. For a prospective student to be considered for admission on those dates, the minimum criteria include a minimum cumulative GPA of 3.0 or greater in all undergraduate course work, passing standardized exam scores, an interview, and an essay. Please contact the Speech-Language Pathology and Audiology program director for more information.

Liberal Studies: 46-47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

Natural Science:

BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**

Any PHYS or CHEM

Recommended:

PHYS 105 - The Physics of Light and Sound **Credits: 3**

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 6

PSYC 215 - Developmental Psychology **Credits: 3**

MATH 217 - Probability and Statistics **Credits: 3**

No courses with SPLP prefix

Major: 44

Required Courses:

EDEX 111 - Introduction to Exceptional Persons **Credits: 3**

SPLP 111 - Introduction to Communication Disorders **Credits: 3**

SPLP 122 - Clinical Phonology **Credits: 3**

SPLP 222 - Introduction to Audiology **Credits: 3**

SPLP 242 - Speech Science **Credits: 3**

SPLP 251 - Anatomy and Physiology of Speech and Swallowing **Credits: 3**

SPLP 275 - Language Science **Credits: 3**

SPLP 310 - Observation in Communication Disorders I **Credits: 1 (1,2)**

SPLP 311 - Aural Rehabilitation **Credits: 3**

SPLP 334 - Language Development **Credits: 3**

SPLP 342 - Neuroscience for Communication Disorders **Credits: 3**

SPLP 401 - Communication and Social Competence for Children with Autism **Credits: 3**

SPLP 406 - Clinical Management of Articulation and Language **Credits: 3**

SPLP 408 - Organic Disorders **Credits: 3**

SPLP 410 - Observation in Communication Disorders II **Credits: 1 (1)**

SPLP 412 - Organization and Administration of Speech, Language, and Hearing Programs **Credits: 3**

Free Electives: 29-30

EDSP 102 - Educational Psychology **Credits: 3**

SPLP 312 - Advanced Audiology and Hearing Disorders **Credits: 3**

SPLP 420 - Undergraduate Clinic **Credits: 1-3 (2)**

SPLP 422 - Central Auditory Processing Disorders in the Educational Setting **Credits: 3**

Total Degree Requirements: 120

(1) Junior standing—attainment of a minimum GPA of 3.25 after the completion of 60cr and verification by the academic advisor that the program's dispositions are met or exceeded—is required to enroll in 300- and 400-level SPLP courses.

(2) Prior to enrollment in SPLP 420 students must successfully obtain: Act 34 and Act 151 clearances, Act 24 Arrest or Conviction Report, Act 114 FBI Fingerprinting (continuing enrollment in IUP is required for fingerprinting to remain valid), Title IX mandated reporter training, TB Test (must be renewed annually), speech and hearing screening. Students must also become a national member of NSSLHA and obtain student clinician professional liability coverage.

Sport Administration Track, Physical Education and Sport, BS

This program prepares students to use a variety of skills to function in a management capacity within the sport industry. Graduates of this program can seek employment in such areas as school and college athletic departments, coaching, community recreation organizations, minor and major league sports franchises, commercial sport facilities, and golf courses, as well as other athletic and sports-related industries. Students acquire management skills that can be used in multiple career tracks. A minor that will enhance their career objectives is encouraged.

Students are required to earn a "C" or better in KHSS 292 in order to take KHSS 351, KHSS 445, KHSS 460, and KHSS 465. Students wishing to change majors into Sport Administration must earn a "C" or better grade in KHSS 292 and have a CGPA above 2.25.

Liberal Studies: 47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 217 - Probability and Statistics **Credits: 3**

Natural Science:

Option I

BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**

One 3cr laboratory course

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

ECON 121 - Principles of Macroeconomics **Credits: 3**

PSYC 101 - General Psychology **Credits: 3**

Global and Multicultural Awareness course

Dimensions of Wellness:

One of the following recommended

KHSS 143 - Wellness **Credits: 3**
FDNT 143 - Current Issues in Nutrition and Wellness **Credits: 3**
NURS 143 - Healthy People—Promoting Wellness **Credits: 3**

Liberal Studies Electives: 6

COSC 101 - Computer Literacy **Credits: 3**
or
IFMG 101 - Computer Literacy **Credits: 3**
ECON 122 - Principles of Microeconomics **Credits: 3**
No course with KHSS prefix

Major: 60

Core Requirements: 9

KHSS 135 - Careers in Kinesiology, Health, and Sport **Credits: 1**
KHSS 175 - Prevention and Care of Injuries to the Physically Active **Credits: 2**
KHSS 225 - Social Issues in Sport **Credits: 3**
KHSS 341 - Evaluations and Analytics in Kinesiology **Credits: 3**

Sport Administration Requirements: 51

ACCT 201 - Accounting Principles I **Credits: 3**
KHSS 270 - Sport Communication **Credits: 3**
KHSS 280 - Aquatic Management and Operation **Credits: 3**
KHSS 292 - Introduction to Sport Management **Credits: 3**
KHSS 319 - Field Practicum I **Credits: 3**
KHSS 320 - Managing Facilities and Events in Sport **Credits: 3**
KHSS 351 - Managing Budgets and Technology in Sport **Credits: 3**
KHSS 445 - Business Practices in Sport **Credits: 3**
KHSS 460 - Law and Issues in Managing Sport **Credits: 3**
KHSS 465 - Sport Management Capstone **Credits: 3**
KHSS 493 - Internship **Credits: 1-12**
MGMT 300 - Human Resource Management **Credits: 3**
MGMT 310 - Principles of Management **Credits: 3**
MKTG 320 - Principles of Marketing **Credits: 3**
MKTG 435 - Professional Selling and Sales Management **Credits: 3**

Major Electives: 6

Two courses from the following:

ACCT 202 - Accounting Principles II **Credits: 3**
BCOM 321 - Business and Interpersonal Communications **Credits: 3**
COMM 150 - Media Aesthetics **Credits: 3**
COMM 251 - Television Production **Credits: 3**
ECON 239 - Economics of Sports **Credits: 3**
FIN 310 - Fundamentals of Finance **Credits: 3**
HOSP 235 - Tourism Management **Credits: 3**
HOSP 280 - Special Event Management **Credits: 3**
HOSP 347 - Meeting and Convention Management **Credits: 3**
KHSS 221 - Human Structure and Function **Credits: 3**
KHSS 315 - Biomechanics **Credits: 3**
KHSS 333 - Psychology of Coaching **Credits: 3**

KHSS 335 - Athletic Coaching **Credits: 3**
KHSS 343 - Physiology of Exercise **Credits: 3**
KHSS 375 - Physiological Basis of Strength Training and Conditioning **Credits: 3**
KHSS 412 - Physical Activity and Stress Management **Credits: 3**
KHSS 437 - Coaching Disability Sport **Credits: 3**
KHSS 441 - Psychosocial Implications for Health and Physical Education **Credits: 3**
MGMT 275 - Introduction to Entrepreneurship **Credits: 3**
MGMT 300 - Human Resource Management **Credits: 3**
MKTG 321 - Consumer Behavior **Credits: 3**

Free Electives: 14

Total Degree Requirements: 120

Supply Chain Management Track, Management, BS

Students in this track are well-grounded in both theory and application, focusing on production, operations, quality issues, and inventory and capacity management.

Liberal Studies: 47-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 107 - Business Mathematics **Credits: 3**
MATH 108 - Applications of Business Mathematics **Credits: 1**

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

ECON 121 - Principles of Macroeconomics **Credits: 3**
PSYC 101 - General Psychology **Credits: 3**
a Global and Multicultural Awareness course (recommended)

Liberal Studies Electives: 6

ECON 122 - Principles of Microeconomics **Credits: 3**
MATH 214 - Probability and Statistics for Business Majors **Credits: 3 (1)**

College: Business Administration Core: 36

Required Courses:

ACCT 201 - Accounting Principles I **Credits: 3**
ACCT 202 - Accounting Principles II **Credits: 3**

BCOM 321 - Business and Interpersonal Communications **Credits: 3**
BLAW 235 - Legal Environment of Business **Credits: 3**
COSC 101 - Computer Literacy **Credits: 3**
or
IFMG 101 - Computer Literacy **Credits: 3**
or
IFMG 110 - Business Spreadsheet Computing **Credits: 3 (2)**
FIN 310 - Fundamentals of Finance **Credits: 3**
IFMG 300 - Information Systems: Theory and Practice **Credits: 3**
MGMT 310 - Principles of Management **Credits: 3**
MGMT 330 - Production and Operations Management **Credits: 3**
MGMT 495 - Business Policy **Credits: 3**
MKTG 320 - Principles of Marketing **Credits: 3**
QBUS 215 - Business Statistics **Credits: 3**

Major: 24

Required Courses:

MGMT 434 - Industrial Quality: Statistical Tools and Management **Credits: 3**
MGMT 437 - Supply Chain Modeling and Analysis **Credits: 3**

MGMT 438 - Seminar in Operations Management **Credits: 3**
or
MGMT 428 - Seminar in Management **Credits: 3**

MKTG 434 - Business Logistics: Technical Analysis and Applications **Credits: 3**

Controlled Electives:

One Course from the Following: 3

ECON 330 - Labor Economics **Credits: 3**
ECON 334 - Managerial Economics **Credits: 3**

Three Courses from the Following: 9

BCOM 342 - Intercultural Business Communication **Credits: 3**
IFMG 475 - Project Management and Implementation **Credits: 3**
MGMT 300 - Human Resource Management **Credits: 3**
MGMT 311 - Human Behavior in Organizations **Credits: 3**
MGMT 401 - Management Development and Training **Credits: 3**

MGMT 461 - Organizational Leadership Theory **Credits: 3**
or
MGMT 462 - Applied Business Leadership Skills **Credits: 3**

MGMT 481 - Special Topics in Management **Credits: 1-3**
MGMT 493 - Management Internship **Credits: 3-12**
QBUS 450 - Data Science for Business **Credits: 3**
SAFE 101 - Introduction to Occupational Safety and Health **Credits: 3**
Other courses as approved by the advisor

Free Electives: 12-13

Total Degree Requirements: 120

(1) MATH 214 or MATH 216 or MATH 217.

(2) IFMG 110 cannot be used as a D/F repeat for COSC 101/IFMG 101.

Bachelor of Science in Education

Art Education, BSED

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 43-44

As outlined in Liberal Studies Requirements with the following specifications:

Fine Arts:

Fulfilled by

ARHI 205 - Ancient to Medieval Art **Credits: 3**

Mathematics: 3

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area : Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Elective: 3

ARHI 207 - Renaissance through Modern Art **Credits: 3**

College: 28

Professional Education Sequence:

An additional 3cr of MATH 101 or above

ACE 103 - Digital Instructional Technology **Credits: 3**

EDSP 102 - Educational Psychology **Credits: 3**

EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits: 2**

EDEX 323 - Instruction of English Language Learners with Special Needs **Credits: 2**

EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**

EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**

EDUC 421 - Student Teaching **Credits: 5-6**

EDUC 441 - Student Teaching **Credits: 5-12**
EDUC 442 - School Law **Credits: 1**

Major: 21

ARED 101 - Introduction to Art Education **Credits: 3**
ARED 215 - Issues in Art Education **Credits: 3**
ARED 215 - Issues in Art Education **Credits: 3**
ARED 317 - Art in K-6 Programs **Credits: 3**
ARED 318 - Art in 7-12 Programs **Credits: 3**
ART 112 - Fundamentals of Drawing **Credits: 3**
ART 113 - Three-Dimensional Design **Credits: 3**
ART 114 - Color and Two-Dimensional Design **Credits: 3**

Controlled Electives: 33

15 credits from any ARHI or ART prefix
3 credits from any ARED prefix

15 Credits from the Following:

ARHI 100 - Arts of the 20th Century **Credits: 3**
ART 111 - Figure Drawing **Credits: 3**
ART 211 - Painting **Credits: 3**
ART 213 - Woodworking: Function and Form **Credits: 3**
ART 214 - Ceramics **Credits: 3**
ART 215 - Sculpture **Credits: 3**
ART 216 - Jewelry and Metals **Credits: 3**
ART 217 - Print Media **Credits: 3**
ART 218 - Introduction to Graphic Design **Credits: 3**

Total Degree Requirements: 125-126

See advisory paragraph "Timely Completion of Degree Requirements" in the section on Requirements for Graduation.

Biology, BSED

The Department of Biology, in conjunction with the College of Education and Communications, provides a program leading to the bachelor of science in education with certification to teach biology. The program is committed to preparing teachers who possess a strong foundation in biology, a broad background in associated sciences, and an extensive preparation in pedagogy.

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 110 - Elementary Functions **Credits: 3 (1)**

Natural Science:

CHEM 111 - General Chemistry I **Credits:** 4
CHEM 112 - General Chemistry II **Credits:** 4
or
CHEM 113 - Advanced General Chemistry I **Credits:** 4
CHEM 114 - Advanced General Chemistry II **Credits:** 4

Social Science:

PSYC 101 - General Psychology **Credits:** 3

Liberal Studies Electives: 7

MATH 217 - Probability and Statistics **Credits:** 3
GEOS 201 - Foundations of Geology **Credits:** 4
No courses with BIOL prefix

College of Education: 31

Preprofessional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits:** 3
EDSP 102 - Educational Psychology **Credits:** 3

Professional Education Sequence:

EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits:** 2
EDEX 323 - Instruction of English Language Learners with Special Needs **Credits:** 2
EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits:** 3
EDUC 242 - Pre-student Teaching Clinical Experience I **Credits:** var-1
EDUC 342 - Pre-student Teaching Clinical Experience II **Credits:** 1
EDUC 441 - Student Teaching **Credits:** 5-12
EDUC 442 - School Law **Credits:** 1
EDUC 451 - Teaching Science in the Secondary School **Credits:** 3

Major: 28

Required Courses:

BIOL 201 - Principles of Ecology and Evolution **Credits:** 4
BIOL 202 - Principles of Cell and Molecular Biology **Credits:** 4
BIOL 203 - Principles of Genetics and Development **Credits:** 4

Required Biology Course:

BIOL 480 - Biology Seminar **Credits:** 1

Controlled Electives: 15

Biology electives: (major courses only) (2)

One course from each area: Cell and Molecular Area, Ecology Area, Organismal Area (A list of courses in each area is available on the Biology Department website or at the Biology office.) A minimum of 6cr must be in courses at the 488 level. At least one course must be a field biology course.

Other Science Requirements: 12

CHEM 231 - Organic Chemistry I **Credits: 4**
CHEM 351 - Biochemistry **Credits: 4 (3)**

PHYS 151 - Medical Physics Lecture **Credits: 3**
and
PHYS 161 - Medical Physics Lab **Credits: 1**

Other Science Requirements:

Exit survey for assessment purposes

Free Electives: 1

Total Degree Requirements: 120

See advisory paragraph "Timely Completion of Degree Requirements" in the section on Requirements for Graduation.

- (1) MATH 121 may be substituted for MATH 110.
- (2) No more than 3cr total from Independent Study, Special Topics, or Internship applies to major; excess applied as free electives.
- (3) The two-semester (6cr) sequence of BIOC 301-BIOC 402 can be substituted for CHEM 351 to meet the biochemistry requirement.

Business Education, BSED

The program leads to the degree of Bachelor of Science in education and Pennsylvania teacher certification in business, computer, and information technology for grades PK-12. The Business Education program is dedicated to preparing teachers who will be qualified and certified to instruct students to live and work in a business environment. The program is intended for those interested in teaching in public elementary, junior/middle, and senior high schools, vocational-technical schools, private business schools, or industry.

Admission to this program requires entering students to meet the guidelines for admission to the College of Education and Communications. Additionally, students must achieve a 3.0 GPA to apply for Step 1 of the Teacher Education process to enroll in major courses, to student teach, and to be recommended for certification. Students must meet the requirements leading to teacher certification as outlined in this catalog.

Before graduation, each business education student must document completion of 500 hours of business work-related experience. This experience can be acquired during summer vacations and vacations and in offices on the campus during the regular school term. Previous documented experience may also be counted.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities:

HIST 196 - Explorations in US History **Credits: 3**

Mathematics:

MATH 151 - Elements of Mathematics I **Credits: 3**

Natural Science:

Option I recommended

Social Science:

ECON 121 - Principles of Macroeconomics **Credits: 3**

PSYC 101 - General Psychology **Credits: 3**

Dimensions of Wellness:

FIN 143 - Financial Wellness **Credits: 3**

Liberal Studies Electives: 3

ECON 122 - Principles of Microeconomics **Credits: 3**

College: 33

Preprofessional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits: 3**

EDSP 102 - Educational Psychology **Credits: 3**

Professional Education Sequence:

EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**

EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**

EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**

EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits: 2**

EDEX 323 - Instruction of English Language Learners with Special Needs **Credits: 2**

EDUC 441 - Student Teaching **Credits: 5-12**

EDUC 442 - School Law **Credits: 1**

EDUC 499 - Multicultural/Multiethnic Education **Credits: 2**

MIDL 321 - 21st-Century Literacies for Diverse Learners **Credits: 3**

Major: 42

Required Courses:

Business Administration Core: 27

ACCT 201 - Accounting Principles I **Credits: 3**

BCOM 321 - Business and Interpersonal Communications **Credits: 3**

BLAW 235 - Legal Environment of Business **Credits: 3**

COMM 101 - Introduction to Communications, Media, and Culture **Credits: 3**

COSC 110 - Problem Solving and Structured Programming **Credits: 3**
FIN 310 - Fundamentals of Finance **Credits: 3**
MGMT 310 - Principles of Management **Credits: 3**
MKTG 320 - Principles of Marketing **Credits: 3**

Business, Computer, and Information Technology Certification: 15

BTED 411 - Methods in Business and Information Technology I **Credits: 3**
BTED 412 - Methods in Business and Information Technology II **Credits: 3**
COMM 440 - Multimedia Production **Credits: 3**
ETIT 330 - Technology in the Classroom **Credits: 3**
MGMT 105 - Introduction to Business **Credits: 3**

Free Electives: 1

Total Degree Requirements: 120

See advisory paragraph "Timely Completion of Degree Requirements" in the section on Requirements for Graduation.

(*) See requirements leading to teacher certification, titled "Admission to Teacher Education," in the College of Education and Communications section of this catalog.

(1) Students can transfer credit from another regionally accredited institution.

Chemistry, BSED

See requirement leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 44

As outlined in Liberal Studies Requirements section with the following specifications:

Mathematics:

MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3**

Natural Science:

PHYS 111 - Physics I Lecture **Credits: 3**

PHYS 121 - Physics I Lab **Credits: 1**

PHYS 112 - Physics II Lecture **Credits: 3**

PHYS 122 - Physics II Lab **Credits: 1**

or

PHYS 131 - Physics I-C Lecture **Credits: 3**

PHYS 141 - Physics I-C Lab **Credits: 1**

PHYS 132 - Physics II-C Lecture **Credits: 3**

PHYS 142 - Physics II-C Lab **Credits: 1**

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Elective: 3

MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3**
No course with CHEM prefix

College: 31

Preprofessional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits: 3**
EDSP 102 - Educational Psychology **Credits: 3**

Professional Education Sequence:

EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits: 2**
EDEX 323 - Instruction of English Language Learners with Special Needs **Credits: 2**
EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**
EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**
EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**
EDUC 441 - Student Teaching **Credits: 5-12**
EDUC 442 - School Law **Credits: 1**
EDUC 451 - Teaching Science in the Secondary School **Credits: 3**

Major: 36-37

Required Courses:

CHEM 111 - General Chemistry I **Credits: 4**
or
CHEM 113 - Advanced General Chemistry I **Credits: 4**
CHEM 112 - General Chemistry II **Credits: 4**
or
CHEM 114 - Advanced General Chemistry II **Credits: 4**
CHEM 314 - Inorganic Chemistry **Credits: 4**
CHEM 231 - Organic Chemistry I **Credits: 4**
CHEM 332 - Organic Chemistry II **Credits: 4**
CHEM 325 - Analytical Chemistry I **Credits: 4**
CHEM 341 - Physical Chemistry I **Credits: 4**
CHEM 343 - Physical Chemistry Laboratory I **Credits: 1**
CHEM 390 - Chemistry Seminar II **Credits: 1 (1)**
CHEM 498 - Problems in Chemistry **Credits: 1-2 (1, 2)**

Controlled Electives:

(2)
BIOC 301 - Foundations of Biochemistry **Credits: 3**
or
CHEM 351 - Biochemistry **Credits: 4**
At least 3cr additional CHEM or BIOC at or above the 300 level

Other Requirements: 8

BIOL 202 - Principles of Cell and Molecular Biology **Credits:** 4
GEOS 201 - Foundations of Geology **Credits:** 4

Free Electives: 0-1

(1)

Total Degree Requirements: 120

(1) Program contains one writing-intensive course (CHEM 343); students need to acquire another W-course in Liberal Studies or as an elective.

(2) Students in the Chemistry Education program who wish to earn an ACS-certified degree in chemistry must take 2cr of CHEM 498, including a written report, and complete at least 7cr, including two lab courses, of CHEM or BIOC at or above the 300 level.

Community Health Education (non-teacher certification), Health and Physical Education, BSED

This program of study focuses on health promotion and disease prevention through community educational services. This track prepares individuals to develop trainings and implement curriculum focused on better health and educational outcomes. Graduates of this program can seek employment with health and education agencies involved in community-based training and prevention related to HIV/STI/AIDS, obesity, dating violence and bullying, communicable diseases, tobacco, drugs and alcohol, sexual health and/or pregnancy prevention. Students can specialize in several emphasis areas, including Communications, Aging Populations, Nutrition, Lifetime Physical Activity, Human Service, Child Studies, and Women's and Gender Studies. Graduates will be eligible to sit for the NCHCEC's Certified Health Education Specialist (CHES) exam. This track does not lead to K-12 teacher certification. Requirements for the Community Health Education Track include the university's Liberal Studies requirements, the departmental core courses, and the Community Health Education required courses. Students must also maintain a cumulative GPA of 2.7 and a "C" or better in all of the required core courses within this track.

Liberal Studies: 43

As outlined in Liberal Studies Requirements section with the following specifications:

Mathematics:

MATH 101 - Foundations of Mathematics **Credits:** 3 or higher (must be approved as Liberal Studies Mathematics courses)

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog

BIOL 104 - Human Biology: How the Human Body Works **Credits:** 4
and a three credit non-laboratory course

Social Science:

PSYC 101 - General Psychology **Credits:** 3

Liberal Studies Elective: 3

MATH 217 - Probability and Statistics **Credits:** 3

Major: 18

Required Courses:

- KHSS 135 - Careers in Kinesiology, Health, and Sport **Credits: 1**
- KHSS 175 - Prevention and Care of Injuries to the Physically Active **Credits: 2**
- KHSS 209 - Motor Behavior **Credits: 3**
- KHSS 256 - Applied Human Structure and Conditioning **Credits: 3**
- KHSS 341 - Evaluations and Analytics in Kinesiology **Credits: 3**
- KHSS 441 - Psychosocial Implications for Health and Physical Education **Credits: 3**
- KHSS 442 - Senior Seminar: Professional Development in Health, Physical Education, and Sport **Credits: 3**

Professional Requirements: 24

Community Health Education Requirements:

- EDSP 102 - Educational Psychology **Credits: 3**
- KHSS 316 - Instruction of Child Health Concepts **Credits: 3**
- KHSS 318 - Preprofessional Experience I **Credits: 3**
- KHSS 325 - School and Community Health **Credits: 3**
- KHSS 370 - Adapted Health and Physical Education **Credits: 3**
- KHSS 417 - Contemporary Issues in School and Community Health **Credits: 3**
- KHSS 420 - Health Education and Promotion at the Workplace **Credits: 3**
- KHSS 426 - Health Science Instruction **Credits: 3**
- KHSS 493 - Internship **Credits: 1-12**

Controlled Electives: 9-12

(Must choose one emphasis area from A-G)

A. Communications (9)

- COMM 101 - Introduction to Communications, Media, and Culture **Credits: 3**
- COMM 205 - Making Presentations with Media **Credits: 3**
- COMM 230 - Global Media and Communication **Credits: 3**

B. Nutrition (12)

- FDNT 212 - Nutrition **Credits: 3**
- FDNT 213 - Life Cycle Nutrition **Credits: 3**
- FDNT 245 - Sports Nutrition **Credits: 3**
- FDNT 402 - Community Nutrition **Credits: 3**

C. Lifetime Physical Activity (12)

- FDNT 245 - Sports Nutrition **Credits: 3**
- KHSS 213 - Recreational Sports and Lifetime Activities **Credits: 3**
- KHSS 350 - Health Aspects of Aging **Credits: 3**
- KHSS 413 - Wellness Coaching for Lifestyle Behavior Management **Credits: 3**

D. Aging Populations (12)

KHSS 350 - Health Aspects of Aging **Credits:** 3
KHSS 413 - Wellness Coaching for Lifestyle Behavior Management **Credits:** 3
PSYC 312 - Adult Development and Aging **Credits:** 3
SOC 357 - Sociology of Aging and the Life-course **Credits:** 3

E. Human Service (12)

PSYC 235 - Social Psychology **Credits:** 3
SOC 320 - Sociological Theory **Credits:** 3
SOC 336 - Sociology of the Family **Credits:** 3
SOC 391 - Foundations of Sociological Practice **Credits:** 3

F. Women's Studies (12)

PSYC 379 - Psychology of Human Sexuality **Credits:** 3
SOC 251 - Sociology of Human Sexuality **Credits:** 3
SOC 427 - Social Perspectives on Intimate Partner Violence **Credits:** 3
WGS 200 - Introduction to Women's and Gender Studies **Credits:** 3

G. Child Studies (9)

SOC 231 - Contemporary Social Problems **Credits:** 3
SOC 333 - Delinquency and Youth **Credits:** 3
SOC 428 - Child Abuse **Credits:** 3

Free Electives: 17-20

Total Degree Requirements: 120

Early Childhood, BSED/Literacy, MEd

This program, which emphasizes early childhood education and literacy, is designed to assist undergraduate students in becoming highly competent and effective teachers of children in PreK through Grade 4. As undergraduates, students in this program meet the academic requirements for certification in Early Childhood Education and earn a bachelor of science in education degree. Students enrolled in this program have the opportunity to apply for Early Admission to the School of Graduate Studies and Research and begin taking graduate courses that apply toward the MEd—Literacy program.

Upon successful completion of the required graduate course work, candidates become certified as Reading Specialists in PreK through Grade 12 and earn a master of education degree with a major in Literacy. This program prepares students to become professional educators who are well-qualified to utilize appropriate techniques and strategies to expand children's cognitive, language, social, emotional, and physical development. During the semester in which they surpass 90 credits, students follow the School of Graduate Studies and Research Early Admission Policy and apply for early admittance to the MEd—Literacy/Reading Specialist program at IUP. A minimum 3.25 GPA is required to apply for early admittance to the graduate program. Once accepted for early admission to this program, students begin taking graduate courses in Literacy to work toward earning Reading Specialist Certification and a master of education degree with a major in Literacy.

Acceptance into the graduate program is contingent upon the student maintaining and graduating with a 3.0 minimum GPA. Students who are accepted for early admission into the MEd—Literacy program take the following courses as undergraduates, as long as they continue to have at least 90 credits and a minimum 3.0 GPA:

LTCY 635 Literacy in Inclusive Classrooms (in place of EDEX 323); LTCY 644 Issues and Trends in the Language Arts (in place of ECED 425); and LTCY 701 Assessment and Acceleration (in place of CDFR 310). A minimum 3.0 GPA is required to apply for teacher certification, to take major courses in the department, student teach, graduate with the BSEd degree, and be accepted into the MEd—Literacy program.

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 43.5

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities:

HIST 196 - Explorations in US History **Credits: 3**

Mathematics:

MATH 151 - Elements of Mathematics I **Credits: 3**

Natural Science:

3 of 4 required

SCI 101 - Fundamentals of Physics **Credits: 2.5**

SCI 102 - Fundamentals of Chemistry **Credits: 2.5**

SCI 103 - Fundamentals of Earth and Space Science **Credits: 2.5**

SCI 104 - Fundamentals of Environmental Biology **Credits: 2.5**

Social Science:

GEOG 101 - Environment and Society **Credits: 3**

GEOG 102 - Geography of the United States and Canada **Credits: 3**

or

GEOG 104 - World Geography: Global Context **Credits: 3**

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 3

MATH 152 - Elements of Mathematics II **Credits: 3**

College: 21-24

Preprofessional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits: 3**

EDSP 102 - Educational Psychology **Credits: 3**

Professional Education Sequence:

EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**

EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**

EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**

EDUC 441 - Student Teaching **Credits: 5-12**

(1)

EDUC 442 - School Law **Credits: 1**

Major: 52.5

Required Courses:

(2, 3)

CDFR 310 - Child Observation and Assessment **Credits: 3**

(4,5)

ECED 112 - Childhood Development Birth–Age 5 **Credits: 3**

ECED 200 - Introduction to Early Childhood Education **Credits: 3**

ECED 215 - The Developing Child: K-4th Grade **Credits: 3**

ECED 250 - Language Development **Credits: 3**

ECED 280 - Maximizing Learning: Engaging All PreK to Grade 4 Learners **Credits: 3**

ECED 310 - Science, Health, and Safety for All PreK to Grade 4 Learners **Credits: 3**

ECED 351 - Literacy for the Emergent Reader: PreK to Grade 1 Learners **Credits: 3**

ECED 411 - Social Studies for All PreK to Grade 4 Learners **Credits: 3**

ECED 425 - Methods of Teaching and Assessing Language Arts: Pre-K to Grade 4 Learners 2.5c-0l-2.5cr **Credits: 2.5**

(5)

ECED 451 - Literacy for the Developing Reader: Grades 2-4 Learners **Credits: 3**

ECED 499 - Advocacy and Collaboration in Diverse Families and Communities **Credits: 3**

ECSP 314 - Creative Experiences and Play for All PreK to Grade 4 Learners **Credits: 3**

EDEX 111 - Introduction to Exceptional Persons **Credits: 3**

EDEX 269 - Identifying and Understanding Children with Academic and Social Learning Needs from Preschool through Adolescence **Credits: 3**

EDEX 323 - Instruction of English Language Learners with Special Needs **Credits: 2**

(5)

MATH 320 - Mathematics for Early Childhood **Credits: 3**

MATH 330 - Teaching Mathematics in the Elementary School **Credits: 3**

Free Electives: 0-3

Total Degree Requirements: 120

(1) Students who are seeking a BSEd degree only (e.g., not early admitted to the MEd—Literacy program) will take 12cr of student teaching. Students who are admitted early to the MEd—Literacy program will take 9cr of student teaching and LTCY 701 for a total of 12cr.

(2) A 3.0 cumulative GPA is required to apply for teacher certification, register for major courses, and student teach.

(3) In the semester in which students earn 90+ credits, they may apply to the School of Graduate Studies and Research for Early Admittance to the MEd—Literacy/Reading Specialist Program. Students must have a minimum 3.25 GPA to apply. Students must follow the Early Admission to Graduate Program Policy. Students who are accepted will automatically become graduate students at IUP upon degree completion with a minimum 3.0 GPA, and fulfillment of criteria outlined in IUP's Early Admission to Graduate Program Policy.

(4) Students must have a grade of "C" or better in PSYC 101 and CDFR 218 or a grade of "C" or better in PSYC 101 and ECED 112 to register for this course.

(5) Students who are accepted for early admission to the MEd—Literacy program take the graduate course outlined in the program's catalog description rather than the undergraduate course listed.

Early Childhood/Special Education, BSED

This Early Childhood Education/Special Education (ECSP) program is designed to assist students in becoming highly qualified, competent, and effective teachers of all learners in grades PreK through 4. The program has an emphasis on best practices in both early childhood education and special education. Students in this program will meet the academic requirements for Pennsylvania certification in PreK to grade 4, as well as special education PreK to grade 8.

This program, combining course work in both early childhood education and special education with extensive field experiences, prepares students to be professional educators who are well qualified to utilize appropriate techniques and strategies to expand all children's cognitive, social, emotional, and physical development. Field experiences will take place in a variety of settings encompassing diverse learning needs as well as learners in birth to grade 3 classrooms, preschool classrooms, K-1 classrooms, and classrooms in grades 2-4.

Admission to this program requires entering students to meet the guidelines for admission to the College of Education and Communications. Additionally, students must achieve a 3.0 GPA to apply for Step 1 of the Teacher Education process to enroll in major courses, to student teach, and to be recommended for certification. Students must meet the requirements leading to teacher certification as outlined in this catalog.

Liberal Studies: 43.5

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities:

HIST 196 - Explorations in US History **Credits: 3**

Mathematics:

MATH 151 - Elements of Mathematics I **Credits: 3**

Natural Science:

(3 of 4 required)

SCI 101 - Fundamentals of Physics **Credits: 2.5**

SCI 102 - Fundamentals of Chemistry **Credits: 2.5**

SCI 103 - Fundamentals of Earth and Space Science **Credits: 2.5**

SCI 104 - Fundamentals of Environmental Biology **Credits: 2.5**

Social Science:

GEOG 101 - Environment and Society **Credits: 3**

GEOG 102 - Geography of the United States and Canada **Credits: 3**

or

GEOG 104 - World Geography: Global Context **Credits: 3**

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Elective: 3

MATH 152 - Elements of Mathematics II **Credits: 3**

College: 25

Preprofessional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits: 3**

or

EDEX 103 - Special Education Technology **Credits:** 3

EDSP 102 - Educational Psychology **Credits:** 3

Professional Education Sequence:

EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits:** 3

EDUC 242 - Pre-student Teaching Clinical Experience I **Credits:** var-1

EDUC 342 - Pre-student Teaching Clinical Experience II **Credits:** 1

EDUC 442 - School Law **Credits:** 1

EDUC 461 - Student Teaching **Credits:** 6

EDUC 471 - Student Teaching **Credits:** 6

Major: 61

Required Courses:

(1)

ECED 117 - Family, Community, and School Relationships in a Diverse Society **Credits:** 2

ECED 200 - Introduction to Early Childhood Education **Credits:** 3

ECED 221 - Literature for the Young Child and Adolescent **Credits:** 3

ECED 250 - Language Development **Credits:** 3

ECED 280 - Maximizing Learning: Engaging All PreK to Grade 4 Learners **Credits:** 3

ECED 310 - Science, Health, and Safety for All PreK to Grade 4 Learners **Credits:** 3

ECED 351 - Literacy for the Emergent Reader: PreK to Grade 1 Learners **Credits:** 3

ECED 411 - Social Studies for All PreK to Grade 4 Learners **Credits:** 3

ECED 451 - Literacy for the Developing Reader: Grades 2-4 Learners **Credits:** 3

ECSP 112 - Growth and Development: Typical and Atypical **Credits:** 3

ECSP 314 - Creative Experiences and Play for All PreK to Grade 4 Learners **Credits:** 3

ECSP 340 - Introduction to Classroom and Behavior Management **Credits:** 3

EDEX 110 - Introduction to Special Needs PreK to Grade 8 **Credits:** 3

EDEX 269 - Identifying and Understanding Children with Academic and Social Learning Needs from Preschool through Adolescence **Credits:** 3

EDEX 278 - Identifying and Understanding Children with Significant Adaptive Behavior and Learning Needs from Birth through Adolescence **Credits:** 3

EDEX 323 - Instruction of English Language Learners with Special Needs **Credits:** 2

EDEX 424 - Strategic Assessment and Instruction in Expository Texts **Credits:** 3

EDEX 435 - Methods and Curriculum—Severe Cognitive Disabilities **Credits:** 3

EDEX 460 - Family Perspectives on Disability **Credits:** 3

MATH 320 - Mathematics for Early Childhood **Credits:** 3

MATH 330 - Teaching Mathematics in the Elementary School **Credits:** 3

Total Degree Requirements: 129.5

(1) A 3.0 cumulative GPA is required to register in the Teacher Certification Sequence courses.

(*) See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Earth and Space Science, BSED

This program prepares students to become certified middle- and high-school teachers in Pennsylvania and other states. Earth and space science teachers in grades 7 to 12 teach subjects that require a broad and solid foundation in science. Course work includes study of geology, meteorology, oceanography, and astronomy. A basic understanding of the cognate sciences, biology, chemistry, and physics, and mathematics is also an essential

part of the major. Courses in the foundations of education and pedagogy complement the subject matter studies. Students create and present lessons, first in their courses and then in school classrooms, culminating in the student teaching experience in the final semester.

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**

Natural Science:

CHEM 111 - General Chemistry I **Credits: 4**

CHEM 112 - General Chemistry II **Credits: 4**

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 6

MATH 217 - Probability and Statistics **Credits: 3**

PHYS 111 - Physics I Lecture **Credits: 3**

No courses with GEOS prefix

College: 31

Preprofessional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits: 3**

EDSP 102 - Educational Psychology **Credits: 3**

Professional Education Sequence:

EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits: 2**

EDEX 323 - Instruction of English Language Learners with Special Needs **Credits: 2**

EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**

EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**

EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**

EDUC 441 - Student Teaching **Credits: 5-12**

EDUC 442 - School Law **Credits: 1**

EDUC 451 - Teaching Science in the Secondary School **Credits: 3**

Major: 39

Required Courses:

BIOL 201 - Principles of Ecology and Evolution **Credits: 4**
GEOS 201 - Foundations of Geology **Credits: 4**
GEOS 202 - Quantitative Methods in the Geoscience **Credits: 2**
GEOS 341 - Planetary Geology **Credits: 4**
GEOS 342 - Stellar Astronomy **Credits: 4**
GEOS 353 - Paleontology **Credits: 4**
GEOS 370 - Oceanography **Credits: 4**
GEOS 371 - Meteorology **Credits: 3**
PHYS 121 - Physics I Lab **Credits: 1**

Controlled Electives: 9

Select 9cr from the following:

GEOS 203 - Surficial Processes **Credits: 4**
Any 300-level GEOS course
Any 400-level GEOS course, except GEOS 470 and GEOS 480
PHYS 112 - Physics II Lecture **Credits: 3**
PHYS 122 - Physics II Lab **Credits: 1**

Free Electives: 2

Total Degree Requirements: 120

English Education, BSED

The English Department offers a program leading to the Bachelor of Science in Education degree program in English education. This program has been accredited by the Council for the Accreditation of Educator Preparation. Graduates are prepared to teach in middle, junior high, and senior high schools.

English education majors fulfill all the requirements for state certification, including practical experience in methods courses and student teaching; content preparation in a variety of literature, language, and composition courses; and philosophical background in current theories of teaching. Although most students choosing the English education major will be best prepared for the secondary school classroom, those who opt not to teach will find that their speaking, writing, and management skills may also be useful to the media, governmental services, and business.

Program requirements are available at the English Department office and in the *English Education Handbook*. Majors must maintain a minimum cumulative GPA of 3.0. They must be formally admitted to English Education, a process that includes application and screening within the English Department as well as an application to the teacher certification program in the College of Education and Communications. This screening involves review of the student's portfolio of written work and faculty evaluations as well as an interview with English education faculty. Refer to the section "Admission to Teacher Education and Certification" in the College of Education and Communications section of this catalog and the *English Education Handbook*.

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education" in the College of Education and Communications section of section of this catalog.

Liberal Studies: 43-44

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities-Literature:

ENGL 122 - Introduction to English Studies **Credits: 3**

Mathematics: 3

MATH 101 - Foundations of Mathematics **Credits:** 3 or higher

Social Science:

PSYC 101 - General Psychology **Credits:** 3

Liberal Studies Elective: 3

MATH (1)

No courses with ENGL prefix

College: 6

Foreign Language Intermediate Level or Free Electives

College: 30

Preprofessional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits:** 3

EDSP 102 - Educational Psychology **Credits:** 3

Professional Education Sequence:

EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits:** 2

EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits:** 3

or

EDSP 577 - Inclusive Secondary Settings Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits:** 2

EDUC 242 - Pre-student Teaching Clinical Experience I **Credits:** var-1

EDUC 342 - Pre-student Teaching Clinical Experience II **Credits:** 1

CHSS 343 - Applied Practice in Secondary English Language Arts **Credits:** 1

EDUC 441 - Student Teaching **Credits:** 5-12

EDUC 442 - School Law **Credits:** 1

EDUC 452 - Teaching of English and Communication in the Secondary School **Credits:** 3

Major: 43

Required Courses:

ENGL 212 - American Literature: Beginnings to 1900 **Credits:** 3

ENGL 220 - Advanced Composition **Credits:** 3

ENGL 314 - Speech and Communication in the Secondary English Classroom **Credits:** 3

ENGL 323 - Teaching Literature and Reading in the Secondary School **Credits:** 3

ENGL 324 - Teaching and Evaluating Writing **Credits:** 3

ENGL 329 - The History of the English Language **Credits:** 1

ENGL 415 - English Language Studies for Teachers **Credits:** 3

or

ENGL 515 English Language Studies for Teachers **Credits:** 3

ENGL 418 - Young Adult Literature **Credits: 3**

or

ENGL 518 - Young Adult Literature **Credits: 3**

ENGL 426 - ESL Methods and Materials **Credits: 3**

or

ENGL 526 - ESL Methods and Materials **Credits: 3**

ENGL 434 - Shakespeare **Credits: 3**

Controlled Electives:

(2)

One Film Studies Track course **Credits: 3**

One Literature/Cultural Track course **Credits: 3**

One general English elective (any track) **Credits: 3**

British Literature Survey

One British literature survey course from

ENGL 210 - British Literature to 1660 **Credits: 3**

ENGL 211 - British Literature to 1660-1900 **Credits: 3**

Literature/Cultural Track:

Choose one course from the following LC Track:

ENGL 213 - British and American Literature Since 1900 **Credits: 3**

ENGL 225 - Introduction to Literature by Women **Credits: 3**

ENGL 226 - Survey of Global Literature Since 1900 **Credits: 3**

ENGL 344 - Ethnic American Literature **Credits: 3**

ENGL 348 - African American Literature **Credits: 3**

ENGL 350 - Gender and Sexual Orientation in Literature, Theory, and Film **Credits: 3**

ENGL 398 - Global Genres **Credits: 3**

ENGL 437

ENGL 463 - Topics in Global Literature and Film **Credits: 3**

Total Degree Requirements: 122-123

(1) The second MATH course is a teacher certification requirement and counts as Liberal Studies elective credits for mathematics.

(2) One of the controlled English-elective track courses (either the Literature/ Cultural Track or the general English elective from any track) must be a Global and Multicultural course; this requirement is separate from and in addition to the global and multicultural Liberal Studies requirement.

English/Language Arts Specialization, Middle-Level Education Grades 4-8, BSED

The Middle-Level Education program prepares undergraduate students to become highly qualified, effective teachers in upper elementary grades 4-6 and in middle schools in grades 7-8. The content and methods courses in this program focus on the developmental and learning characteristics of students in this age group. Pedagogy courses present research-based strategies for engaging students in mathematics, science, social studies, and language arts content. Each student focuses on one of these content areas for building a solid, content-rich background to become certified as a middle-level educator in grades 4-8. The **English/Language Arts Specialization** is designed to prepare preservice teachers to meet the demands of

teaching all academic subjects at the middle level in grades 4-8 with a specialization in English/language arts education. The **Social Studies Specialization** prepares preservice teachers to meet the demands of teaching all academic subjects at the middle level in grades 4-8 with a social studies focus.

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities:

HIST 196 - Explorations in US History **Credits: 3**
ENGL 122 - Introduction to English Studies **Credits: 3**

Mathematics:

MATH 151 - Elements of Mathematics I **Credits: 3**

Natural Science:

BIOL 103 - Life on Earth **Credits: 4**
or
BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**
or
BIOL 106 - Human Genetics and Health **Credits: 3**
SCI 105 - Physical Science I **Credits: 4**

Social Science:

ECON 101 - Basic Economics **Credits: 3**
or
ECON 121 - Principles of Macroeconomics **Credits: 3**
GEOG 101 - Environment and Society **Credits: 3**

GEOG 102 - Geography of the United States and Canada **Credits: 3**
or
GEOG 104 - World Geography: Global Context **Credits: 3**
PLSC 101 - World Politics **Credits: 3**
or
PLSC 111 - American Government **Credits: 3**

Liberal Studies Elective: 3

MATH 152 - Elements of Mathematics II **Credits: 3**

College: 28

Preprofessional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits: 3**

EDSP 102 - Educational Psychology **Credits:** 3

Professional Education Sequence:

EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits:** 2
EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits:** 3
EDUC 242 - Pre-student Teaching Clinical Experience I **Credits:** var-1
EDUC 342 - Pre-student Teaching Clinical Experience II **Credits:** 1
EDUC 421 - Student Teaching **Credits:** 5-6
EDUC 440 - Professional Seminar: Teacher as Leader and Researcher Grades 4-8 **Credits:** 2
EDUC 441 - Student Teaching **Credits:** 5-12
EDUC 442 - School Law **Credits:** 1
EDUC 499 - Multicultural/Multiethnic Education **Credits:** 2

Major: 31

Required Middle-Level Courses:

GEOS 101 - The Dynamic Earth **Credits:** 3 (2)
GEOS 102 - The Dynamic Earth Lab **Credits:** 1
MATH 317 - Probability and Statistics for Mathematics Instruction **Credits:** 3
MATH 413 - Methods for Teaching Mathematics **Credits:** 3
MIDL 221 - Literature for Middle Level **Credits:** 3
MIDL 222 - Reading Instruction and Assessment in Grades 4-8 **Credits:** 3
MIDL 310 - Instructional Theory and Planning for the Middle Level **Credits:** 3
MIDL 311 - Social Studies Instruction and Assessment in Grades 4-8 **Credits:** 3
MIDL 312 - Science Instruction and Assessment in Grades 4-8 **Credits:** 3
MIDL 315 - Classroom Management and Adolescent Development **Credits:** 3
MIDL 425 - Methods of Teaching Language Arts in Grades 4-8 **Credits:** 3

English/Language Arts Distribution Requirements: 18

ENGL 314 - Speech and Communication in the Secondary English Classroom **Credits:** 3
ENGL 324 - Teaching and Evaluating Writing **Credits:** 3
ENGL 415 - English Language Studies for Teachers **Credits:** 3
MIDL 321 - 21st-Century Literacies for Diverse Learners **Credits:** 3
MIDL 422 - Diagnostic and Remedial Reading **Credits:** 3

Total Degree Requirements: 123

- (1) A 3.0 cumulative GPA is required to register for the Teacher Certification Sequence courses.
- (2) The course meets the PDE requirement of 4cr in geoscience for Middle- Level Education Grades 4-8 certification.

Family and Consumer Sciences Education K-12, BSED

The K-12 Family and Consumer Sciences Education program prepares students for the teaching of family and consumer sciences-related subjects in the public schools. Course work is required in all areas of family and consumer services, including child development and family relations, consumer economics, clothing, foods, and interior design. Professional education courses also are required.

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 151 - Elements of Mathematics I **Credits: 3**

Natural Science:

BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**

BIOL 105 - Cell Biology **Credits: 3**

BIOL 106 - Human Genetics and Health **Credits: 3**

or

CHEM 101 - College Chemistry I **Credits: 4**

CHEM 102 - College Chemistry II **Credits: 4**

or

CHEM 111 - General Chemistry I **Credits: 4**

CHEM 112 - General Chemistry II **Credits: 4**

Social Science:

PSYC 101 - General Psychology **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**

ANTH 110 - Contemporary Anthropology **Credits: 3**

or

Any global or multicultural social science

Liberal Studies Electives: 6

CDFR 218 - Child Development **Credits: 3**

MATH 152 - Elements of Mathematics II **Credits: 3**

No courses with FCSE prefix

College: 34

Preprofessional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits: 3**

EDSP 102 - Educational Psychology **Credits: 3**

Professional Education Sequence:

EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits: 2**

EDEX 323 - Instruction of English Language Learners with Special Needs **Credits: 2**

EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**

EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**

EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**

EDUC 441 - Student Teaching **Credits: 5-12**

EDUC 442 - School Law **Credits:** 1

FCSE 350 - Teaching Family Life Education **Credits:** 3

FCSE 450 - Teaching Vocational and Family Consumer Science Education **Credits:** 3

Major: 28

Required Courses:

CDFR 224 - Marriage and Family Relations **Credits:** 3

CDFR 321 - Preschool Education: Play and Developmentally Appropriate Practices **Credits:** 3

CDFR 429 - Teaching in Community Settings **Credits:** 3

FCSE 315 - Consumer Economics and Family Finance **Credits:** 3

FDNT 150 - Foods **Credits:** 3

FDNT 151 - Foods Laboratory **Credits:** 1

FDNT 212 - Nutrition **Credits:** 3

FSMR 112 - Fundamentals of Clothing Construction **Credits:** 3

FSMR 215 - Textiles **Credits:** 3

INDS 105 - Introduction to Interior Design **Credits:** 3

Free Electives: 11

(#) Total Degree Requirements: 120

(*) See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

(#) See advisory paragraph "Timely Completion of Degree Requirements" in the section on Requirements for Graduation.

History Track, Social Studies Education, BSED

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog. To student teach, students must have a 3.0 cumulative GPA in their major (social science and history courses). To be licensed to teach, education/history majors must apply for social studies education certification.

Liberal Studies: 43

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities-History:

Fulfilled by required courses in major

Mathematics: 3

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area: Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

ANTH 110 - Contemporary Anthropology **Credits:** 3
ECON 121 - Principles of Macroeconomics **Credits:** 3
PSYC 101 - General Psychology **Credits:** 3

Liberal Studies Electives: 6

ECON 122 - Principles of Microeconomics **Credits:** 3
GEOG 230 - Cultural Geography **Credits:** 3
No courses with HIST prefix

College: 36

3 additional credits of MATH 101 level or above (in addition to Liberal Studies MATH) (1)
CHSS 142 - Introduction to Secondary Social Studies Education **Credits:** 1

Preprofessional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits:** 3
EDSP 102 - Educational Psychology **Credits:** 3

Professional Education Sequence:

CHSS 342 - Social Studies Teaching Lab **Credits:** 1
EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits:** 2
EDEX 323 - Instruction of English Language Learners with Special Needs **Credits:** 2
EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits:** 3
EDUC 242 - Pre-student Teaching Clinical Experience I **Credits:** var-1
EDUC 342 - Pre-student Teaching Clinical Experience II **Credits:** 1
EDUC 441 - Student Teaching **Credits:** 5-12
EDUC 442 - School Law **Credits:** 1
EDUC 455 - Teaching of Social Studies in Secondary Schools **Credits:** 3

Major: 29

Foundation Courses:

(2)
HIST 201 - Western Civilization before 1600 **Credits:** 3
HIST 202 - Western Civilization since 1600 **Credits:** 3
HIST 204 - United States History to 1877 **Credits:** 3
HIST 205 - United States History since 1877 **Credits:** 3

Research Courses:

HIST 295 - Introduction to Historical Studies **Credits:** 2
HIST 395 - Introduction to Historical Methods **Credits:** 3
HIST 494 (3)
HIST 495 - Topics in United States History **Credits:** 3 (3)
HIST 496 - Topics in European History **Credits:** 3 (3)
HIST 497 - Topics in Non-Western History **Credits:** 3 (3)
HIST 498 - Topics in Comparative History **Credits:** 3 (3)

Controlled Electives: 9

- One non-Western history course: Latin America, Africa, Asia, Middle East, or Russia, 300 or 400 level
- One United States history course at the 300 or 400 level
- One history course at the 300 or 400 level

Social Science Distribution: 12

- GEOG XXX 200-level or higher GEOG course **Credits: 3**
- PLSC 111 - American Government **Credits: 3**
- PLSC 280 - Comparative Government I: Western Political Systems **Credits: 3**
or
- PLSC 285 - Comparative Government II: Non-Western Political Systems **Credits: 3**
- SOC 337 - Society, Globalization, and Risk **Credits: 3**
or
- SOC 362 - Racial and Ethnic Minorities **Credits: 3**
or
- SOC 231 - Contemporary Social Problems **Credits: 3**

Total Degree Requirements: 120

- (1) Students are required to take an additional 3cr of MATH beyond the Liberal Studies requirement for a total of 6cr, all of which must be 101 level or above.
- (2) In exceptional cases, the student's advisor may give special permission to substitute two upper-level courses for one of the foundation courses.
- (3) This requirement may be fulfilled by completing the departmental honors program or graduate seminar with a concluding paper.

K-12 Teacher Education, Health and Physical Education, BSED

The Bachelor of Science in Education–Health and Physical Education provides emphasis on pedagogical content and application. This program prepares students with the knowledge and experience to instruct in various learning environments. Two specialty programs of study have been developed for this degree program, including the K-12 Teacher Education Certification Track and two non-teacher certification tracks, Community Health Education and Recreation and Leisure Studies. These programs provide students with the theory, strategy, and application necessary to work with individuals in various instructional settings. Each program provides an interdisciplinary experience that prepares students for specific career paths as well as multiple credentialing options.

K-12 Teacher Education

The Health and Physical Education Teacher Education program is accredited by the National Council for Accreditation of Teacher Education. Requirements for the bachelor of science in education degree program in health and physical education include the university's Liberal Studies requirements, Professional Education requirements, and the Health and Physical Education core requirements. Upon completion of the degree program and successfully passing the Praxis exam, the student is qualified for an Instructional I Certificate in Health and Physical Education, issued by the Pennsylvania Department of Education in Harrisburg. This certificate is valid for teaching health and physical education in grades K-12 for three years in the public schools of Pennsylvania. All students seeking Pennsylvania certification must follow the 3-Step Process described in the section "Admission to Teacher Education and Certification" found in the College of Education and Communications section of this catalog.

The Health and Physical Education curriculum identifies a required core of studies that emphasizes a body of knowledge relevant to the study of professional health and physical education, as well as the study of physical education and sport. Courses contained in the core are those that are intended to enable students to identify and solve problems by applying relevant knowledge and also to engage in self-directed learning.

Candidates for degree programs in health and physical education must demonstrate acceptable cognitive and psychomotor qualifications as well as desirable character and personality traits. The professional programs seek to foster those qualities of individual character and competence that are inherent in personal and professional maturity. Specific competencies and curriculum requirements are defined within each degree-specific program, and student progress is supervised by the academic advisor.

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 101 - Foundations of Mathematics **Credits:** 3 or higher (must be approved as Liberal Studies Mathematics courses)

Natural Science:

BIOL 104 - Human Biology: How the Human Body Works **Credits:** 4

BIOL 106 - Human Genetics and Health **Credits:** 3

or

CHEM 101 - College Chemistry I **Credits:** 4

CHEM 102 - College Chemistry II **Credits:** 4

Social Science:

PSYC 101 - General Psychology **Credits:** 3

Liberal Studies Elective: 3

MATH 217 - Probability and Statistics **Credits:** 3

No course with KHSS prefix

Major: 25

(1)

Required Courses:

KHSS 135 - Careers in Kinesiology, Health, and Sport **Credits:** 1

KHSS 175 - Prevention and Care of Injuries to the Physically Active **Credits:** 2

KHSS 209 - Motor Behavior **Credits:** 3

KHSS 221 - Human Structure and Function **Credits:** 3

KHSS 261 - Water Safety Instructor **Credits:** 1

KHSS 315 - Biomechanics **Credits:** 3

KHSS 341 - Evaluations and Analytics in Kinesiology **Credits:** 3

KHSS 343 - Physiology of Exercise **Credits:** 3

KHSS 441 - Psychosocial Implications for Health and Physical Education **Credits:** 3

KHSS 442 - Senior Seminar: Professional Development in Health, Physical Education, and Sport **Credits:** 3

Professional Requirements: 27

Health and Physical Education Requirements:

KHSS 213 - Recreational Sports and Lifetime Activities **Credits:** 3

KHSS 216 - Instruction of Fundamental Movement Skills **Credits:** 3

KHSS 218 - Instruction of Tactical Skills and Fitness Concepts **Credits:** 3
KHSS 316 - Instruction of Child Health Concepts **Credits:** 3
KHSS 318 - Preprofessional Experience I **Credits:** 3
KHSS 325 - School and Community Health **Credits:** 3
KHSS 370 - Adapted Health and Physical Education **Credits:** 3
KHSS 417 - Contemporary Issues in School and Community Health **Credits:** 3
KHSS 426 - Health Science Instruction **Credits:** 3

College: 23

Preprofessional Education Requirements:

ACE 103 - Digital Instructional Technology **Credits:** 3
EDEX 323 - Instruction of English Language Learners with Special Needs **Credits:** 2
EDSP 102 - Educational Psychology **Credits:** 3

Professional Education Requirements:

EDUC 242 - Pre-student Teaching Clinical Experience I **Credits:** var-1
EDUC 342 - Pre-student Teaching Clinical Experience II **Credits:** 1
EDUC 421 - Student Teaching **Credits:** 5-6
EDUC 441 - Student Teaching **Credits:** 5-12
EDUC 442 - School Law **Credits:** 1

Free Electives: 1

Total Degree Requirements: 120

See advisory paragraph "Timely Completion of Degree Requirements" in the section on Requirements for Graduation.

(1) Students are required to obtain and keep CPR instructor certification and water safety instructor certification current before student teaching and through graduation.

Mathematics Education, BSED

The program leading to the BSEd degree with a major in mathematics education prepares the student for teaching mathematics at one of two different concentrations. The secondary mathematics concentration prepares the student for teaching mathematics in grades 7-12. The middle level education concentration prepares the student for teaching grades 4-8 with a specialization in mathematics. Graduates from the program also have the option to continue their formal education at the graduate level or work in government or industry.

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 43-45

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities:

HIST 196 - Explorations in US History **Credits:** 3

Mathematics:

MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3**

or

MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4 (1)**

Social Science: (2)

Natural Science: (3)

Liberal Studies Elective: 3

No courses with MATH prefix

College: 29-31

Preprofessional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits: 3**

EDSP 102 - Educational Psychology **Credits: 3**

Professional Education Sequence:

EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits: 2**

EDEX 323 - Instruction of English Language Learners with Special Needs **Credits: 2**

(4)

EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**

EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**

EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**

EDUC 441 - Student Teaching **Credits: 5-12 (12 credits required)**

EDUC 442 - School Law **Credits: 1**

MATH 413 - Methods for Teaching Mathematics **Credits: 3**

Major: 19

Required Courses:

MATH 111 - First-year Seminar **Credits: 1**

MATH 317 - Probability and Statistics for Mathematics Instruction **Credits: 3**

MATH 456 - Geometry for Mathematics Instruction **Credits: 3**

MATH 457 - Number Theory for Mathematics Instruction **Credits: 3**

MATH 460 - Technology in Mathematics Instruction **Credits: 3**

MATH 461 - Discrete Mathematics for Mathematics Instruction **Credits: 3**

MATH 471 - Algebra for Mathematics Instruction **Credits: 3**

Concentration Area:

Select one concentration

Secondary Mathematics Concentration: 24

COSC 110 - Problem Solving and Structured Programming **Credits:** 3
MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits:** 3
MATH 171 - Introduction to Linear Algebra **Credits:** 3
MATH 216 - Probability and Statistics for Natural Sciences **Credits:** 3
MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits:** 3
MATH 271 - Introduction to Mathematical Proofs I **Credits:** 3
MATH 272 - Introduction to Mathematical Proofs II **Credits:** 3
MATH 350 - History of Mathematics **Credits:** 3

Free Electives Secondary Mathematics: 2-3

Total Degree Requirements Secondary Mathematics: 120

Middle Level Mathematics Concentration: 28

One additional math course **Credits:** 3 (5)
GEOS 101 - The Dynamic Earth **Credits:** 3 (6)
GEOS 102 - The Dynamic Earth Lab **Credits:** 1
MIDL 221 - Literature for Middle Level **Credits:** 3
MIDL 222 - Reading Instruction and Assessment in Grades 4-8 **Credits:** 3
MIDL 310 - Instructional Theory and Planning for the Middle Level **Credits:** 3
MIDL 311 - Social Studies Instruction and Assessment in Grades 4-8 **Credits:** 3
MIDL 312 - Science Instruction and Assessment in Grades 4-8 **Credits:** 3
MIDL 315 - Classroom Management and Adolescent Development **Credits:** 3
MIDL 425 - Methods of Teaching Language Arts in Grades 4-8 **Credits:** 3

Total Degree Requirement Middle Level Mathematics: 121

(*) See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

- (1) Students in the secondary mathematics concentration take MATH 125 and students in the middle level concentration take MATH 121.
- (2) Students in the secondary mathematics concentration take PSYC 101 and students in the middle level concentration take ECON 101 or ECON 121; GEOG 101, GEOG 102, GEOG 104; and PLSC 101 or PLSC 111.
- (3) Students in the middle level concentration take BIOL 103 or BIOL 104 or BIOL 106 /BIOL 116; SCI 105.
- (4) Students in the secondary education concentration only.
- (5) The following courses are excluded MATH 100, MATH 101, and MATH 150. This course can be used as part of the 6crs of math needed to apply for Step 1 of Teacher Education.
- (6) The course meets the PDE requirement of 4cr in geoscience for Middle- Level Education Grades 4-8 certification

Music Education, BSED

Also see requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 43

As outlined in the Liberal Studies Requirements with the following specifications:

Fine Arts:

Fulfilled by courses in the major

Humanities:

MUHI 102 - Music and Literature Survey **Credits: 3**

Mathematics: 3

One of the following

MATH 101 - Foundations of Mathematics **Credits: 3**

MATH 105 - College Algebra **Credits: 3**

MATH 110 - Elementary Functions **Credits: 3**

MATH 217 - Probability and Statistics **Credits: 3**

Natural Science: Option II

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area : Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 6

MUHI 301 - Music History I **Credits: 3**

MUHI 302 - Music History II **Credits: 3**

College: 32

Professional Education Sequence:

EDEX 323 - Instruction of English Language Learners with Special Needs **Credits: 2**

EDSP 102 - Educational Psychology **Credits: 3**

EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**

EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**

EDUC 421 - Student Teaching **Credits: 5-6**

EDUC 441 - Student Teaching **Credits: 5-12**

EDUC 442 - School Law **Credits: 1**

MUSC 240 - Technology in the Music Classroom **Credits: 2**

MUSC 331 - Elementary Methods **Credits: 2**

MUSC 333 - Instrumental Methods **Credits: 2**

MUSC 335 - Music for Students with Disabilities in Inclusive Settings **Credits: 1**

MUSC 337 - General/Choral Methods **Credits: 2**

One Additional Course from

MATH 101 - Foundations of Mathematics **Credits: 3**

MATH 105 - College Algebra **Credits: 3**

MATH 110 - Elementary Functions **Credits:** 3
MATH 217 - Probability and Statistics **Credits:** 3

Major: 53

Required Courses:

APMU (Primary) Applied Music I-VII **Credits:** 14
APMU 427 - Capstone Jury: Primary Instrument **Credits:** 0
MUSC 111 - Theory Skills I **Credits:** 2
MUSC 112 - Theory Skills II **Credits:** 2
MUSC 115 - Theory I **Credits:** 3
MUSC 116 - Theory II **Credits:** 3
MUSC 120-MUSC 140 7 semesters of music ensembles (0-1cr each) **Credits:** 0-1
MUSC 190 - Introduction to Music Education **Credits:** 1
MUSC 211 - Theory Skills III **Credits:** 2
MUSC 212 - Theory Skills IV **Credits:** 2
MUSC 215 - Theory III **Credits:** 3
MUSC 216 - Theory IV **Credits:** 3
MUSC 311 - Fundamentals of Conducting **Credits:** 2
MUSC 312 - Choral Conducting **Credits:** 2
or
MUSC 313 - Instrumental Conducting **Credits:** 2
MUSC 475 - Music Lab **Credits:** 0 (7 semesters of recital attendance)

Concentration Area Courses:

(select one concentration)

Voice Concentration

APMU 101 - Piano I **Credits:** 1
APMU 151 - Piano II **Credits:** 1
APMU 201 - Piano III **Credits:** 1
APMU 251 - Piano IV **Credits:** 1
APMU 127 - Piano Proficiency Level II **Credits:** 0
MUSC 351 - Italian Diction and Literature **Credits:** 1
MUSC 353 - French Diction and Literature **Credits:** 1
MUSC 354 - German Diction and Literature **Credits:** 1

Select Two of the Following Class Instrument Courses: 2

MUSC 155 - Class Strings I **Credits:** 1
MUSC 157 - Class Percussion I **Credits:** 1
MUSC 159 - Class Brass I **Credits:** 1
MUSC 161 - Class Woodwinds I **Credits:** 1

Instrumental Concentration

APMU 126 - Piano Proficiency Level I **Credits:** 0
MUSC 121 - Chamber Singers **Credits:** 0/1
or
MUSC 122 - University Chorale **Credits:** 0/1
or

MUSC 134 - University Chorus **Credits:** 0-1
MUSC 151 - Class Voice I **Credits:** 1
MUSC 153 - Class Piano I **Credits:** 1
MUSC 154 - Class Piano II **Credits:** 1
MUSC 155 - Class Strings I **Credits:** 1
MUSC 157 - Class Percussion I **Credits:** 1
MUSC 159 - Class Brass I **Credits:** 1
MUSC 161 - Class Woodwinds I **Credits:** 1

Controlled Electives:

Select courses with MUSC, MUHI, or APMU prefixes to earn a total of 53cr in major.

Total Degree Requirements: 128

Physics, BSED

The **BSEd—Physics Education** combines the content knowledge of physics with the pedagogical training offered by the College of Education and Communications to prepare graduates to teach physics as well as science in the secondary school.

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 47

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits:** 3

Natural Science:

CHEM 111 - General Chemistry I **Credits:** 4
CHEM 112 - General Chemistry II **Credits:** 4
or
CHEM 113 - Advanced General Chemistry I **Credits:** 4
CHEM 114 - Advanced General Chemistry II **Credits:** 4

Social Science:

PSYC 101 - General Psychology **Credits:** 3

Liberal Studies Electives: 6

MATH 341 - Differential Equations **Credits:** 3

GEOS 101 - The Dynamic Earth **Credits:** 3
or
GEOS 103 - Oceans and Atmospheres **Credits:** 3
or
GEOS 105 - Exploring the Universe **Credits:** 3

No courses with PHYS prefix

College: 31

Preprofessional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits:** 3

EDSP 102 - Educational Psychology **Credits:** 3

Professional Education Sequence:

EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits:** 2

EDEX 323 - Instruction of English Language Learners with Special Needs **Credits:** 2

EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits:** 3

EDUC 242 - Pre-student Teaching Clinical Experience I **Credits:** var-1

EDUC 342 - Pre-student Teaching Clinical Experience II **Credits:** 1

EDUC 441 - Student Teaching **Credits:** 5-12

EDUC 442 - School Law **Credits:** 1

EDUC 451 - Teaching Science in the Secondary School **Credits:** 3

Major: 33

Required Courses:

PHYS 131 - Physics I-C Lecture **Credits:** 3

PHYS 132 - Physics II-C Lecture **Credits:** 3

PHYS 141 - Physics I-C Lab **Credits:** 1

PHYS 142 - Physics II-C Lab **Credits:** 1

PHYS 231 - Electronics **Credits:** 4

PHYS 331 - Modern Physics **Credits:** 3

PHYS 345 - Optics **Credits:** 3

or

PHYS 342 - Thermal and Statistical Physics **Credits:** 3

PHYS 350 - Intermediate Experimental Physics I **Credits:** 3

PHYS 441 - Classical Mechanics **Credits:** 3

PHYS 451 - Electricity and Magnetism **Credits:** 3

Controlled Elective: 6

Physics electives—two major courses 200 level or higher

Other Requirements: 10

BIOL 201 - Principles of Ecology and Evolution **Credits:** 4

or

BIOL 202 - Principles of Cell and Molecular Biology **Credits:** 4

MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits:** 3

MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits:** 3

Total Degree Requirements: 121

See advisory paragraph "Timely Completion of Degree Requirements" in the section on Requirements for Graduation.

Science Specialization, Middle-Level Education Grades 4-8, BSED

The Middle-Level Education program prepares undergraduate students to become highly qualified, effective teachers in upper elementary grades 4-6 and in middle schools in grades 7-8. The content and methods courses in this program focus on the developmental and learning characteristics of students in this age group. Pedagogy courses present research-based strategies for engaging students in mathematics, science, social studies, and language arts content. Each student focuses on one of these content areas for building a solid, content-rich background to become certified as a middle-level educator in grades 4-8. The **English/Language Arts Specialization** is designed to prepare preservice teachers to meet the demands of teaching all academic subjects at the middle level in grades 4-8 with a specialization in English/language arts education. The **Social Studies Specialization** prepares preservice teachers to meet the demands of teaching all academic subjects at the middle level in grades 4-8 with a social studies focus. The **Science Specialization** prepares preservice teachers to meet the demands of teaching all academic subjects at the middle level in grades 4-8 with a science focus. The **Mathematics Specialization** prepares preservice teachers to meet the demands of teaching all academic subjects at the middle level in grades 4-8 with a mathematics focus.

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities-History:

HIST 196 - Explorations in US History **Credits: 3**

Mathematics:

MATH 151 - Elements of Mathematics I **Credits: 3**

Natural Science:

BIOL 103 - Life on Earth **Credits: 4**

or

BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**

or

BIOL 106 - Human Genetics and Health **Credits: 3**

SCI 105 - Physical Science I **Credits: 4**

Social Science:

GEOG 101 - Environment and Society **Credits: 3**

GEOG 102 - Geography of the United States and Canada **Credits: 3**

or

GEOG 104 - World Geography: Global Context **Credits: 3**

ECON 101 - Basic Economics **Credits: 3**

or

ECON 121 - Principles of Macroeconomics **Credits: 3**

PLSC 101 - World Politics **Credits: 3**

or

PLSC 111 - American Government **Credits: 3**

Liberal Studies Elective: 3

MATH 152 - Elements of Mathematics II **Credits: 3**

College: 28

Preprofessional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits: 3**

EDSP 102 - Educational Psychology **Credits: 3**

Professional Education Sequence:

EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits: 2**

EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**

EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**

EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**

EDUC 421 - Student Teaching **Credits: 5-6**

EDUC 440 - Professional Seminar: Teacher as Leader and Researcher Grades 4-8 **Credits: 2**

EDUC 441 - Student Teaching **Credits: 5-12**

EDUC 442 - School Law **Credits: 1**

EDUC 499 - Multicultural/Multiethnic Education **Credits: 2**

Major: 31

Required Middle-Level Courses:

GEOS 101 - The Dynamic Earth **Credits: 3**

GEOS 102 - The Dynamic Earth Lab **Credits: 1**

MATH 317 - Probability and Statistics for Mathematics Instruction **Credits: 3**

MATH 413 - Methods for Teaching Mathematics **Credits: 3**

MIDL 221 - Literature for Middle Level **Credits: 3**

MIDL 222 - Reading Instruction and Assessment in Grades 4-8 **Credits: 3**

MIDL 310 - Instructional Theory and Planning for the Middle Level **Credits: 3**

MIDL 311 - Social Studies Instruction and Assessment in Grades 4-8 **Credits: 3**

MIDL 312 - Science Instruction and Assessment in Grades 4-8 **Credits: 3**

MIDL 315 - Classroom Management and Adolescent Development **Credits: 3**

MIDL 425 - Methods of Teaching Language Arts in Grades 4-8 **Credits: 3**

Science Distribution Requirements: 18

BIOL 113

BIOL 114

BIOL 115 - Biotic Diversity of North America **Credits: 3**

or

BIOL 119 - Emerging Diseases **Credits: 3**

CHEM 101 - College Chemistry I **Credits: 4**

CHEM 102 - College Chemistry II **Credits: 4**

GEOS 150 - Geology of National Parks **Credits: 3**

or

GEOS 151 - The Age of Dinosaurs **Credits: 3**

PHYS 151 - Medical Physics Lecture **Credits: 3**

Total Degree Requirements: 121

Social Studies Specialization, Middle-Level Education Grades 4-8, BSED

The Middle-Level Education program prepares undergraduate students to become highly qualified, effective teachers in upper elementary grades 4-6 and in middle schools in grades 7-8. The content and methods courses in this program focus on the developmental and learning characteristics of students in this age group. Pedagogy courses present research-based strategies for engaging students in mathematics, science, social studies, and language arts content. Each student focuses on one of these content areas for building a solid, content-rich background to become certified as a middle-level educator in grades 4-8. The **English/Language Arts Specialization** is designed to prepare preservice teachers to meet the demands of teaching all academic subjects at the middle level in grades 4-8 with a specialization in English/language arts education. The **Social Studies Specialization** prepares preservice teachers to meet the demands of teaching all academic subjects at the middle level in grades 4-8 with a social studies focus.

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities-History:

HIST 196 - Explorations in US History **Credits:** 3

Mathematics:

MATH 151 - Elements of Mathematics I **Credits:** 3

Natural Science:

BIOL 103 - Life on Earth **Credits:** 4

or

BIOL 104 - Human Biology: How the Human Body Works **Credits:** 4

or

BIOL 106 - Human Genetics and Health **Credits:** 3

SCI 105 - Physical Science I **Credits:** 4

Social Science:

GEOG 101 - Environment and Society **Credits:** 3

GEOG 102 - Geography of the United States and Canada **Credits:** 3

or

GEOG 104 - World Geography: Global Context **Credits:** 3

ECON 101 - Basic Economics **Credits:** 3

or

ECON 121 - Principles of Macroeconomics **Credits:** 3

PLSC 101 - World Politics **Credits:** 3

or

PLSC 111 - American Government **Credits:** 3

Liberal Studies Elective: 3

MATH 152 - Elements of Mathematics II **Credits: 3**

College: 28

Pre-professional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits: 3**

EDSP 102 - Educational Psychology **Credits: 3**

Professional Education Sequence:

EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits: 2**

EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**

EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**

EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**

EDUC 421 - Student Teaching **Credits: 5-6**

EDUC 440 - Professional Seminar: Teacher as Leader and Researcher Grades 4-8 **Credits: 2**

EDUC 441 - Student Teaching **Credits: 5-12**

EDUC 442 - School Law **Credits: 1**

EDUC 499 - Multicultural/Multiethnic Education **Credits: 2**

Major: 31

Required Middle-Level Courses:

GEOS 101 - The Dynamic Earth **Credits: 3**

GEOS 102 - The Dynamic Earth Lab **Credits: 1**

MATH 317 - Probability and Statistics for Mathematics Instruction **Credits: 3**

MATH 413 - Methods for Teaching Mathematics **Credits: 3**

MIDL 221 - Literature for Middle Level **Credits: 3**

MIDL 222 - Reading Instruction and Assessment in Grades 4-8 **Credits: 3**

MIDL 310 - Instructional Theory and Planning for the Middle Level **Credits: 3**

MIDL 311 - Social Studies Instruction and Assessment in Grades 4-8 **Credits: 3**

MIDL 312 - Science Instruction and Assessment in Grades 4-8 **Credits: 3**

MIDL 315 - Classroom Management and Adolescent Development **Credits: 3**

MIDL 425 - Methods of Teaching Language Arts in Grades 4-8 **Credits: 3**

Social Studies Distribution Requirements: 18

GEOG 230 - Cultural Geography **Credits: 3**

HIST 201 - Western Civilization before 1600 **Credits: 3**

HIST 202 - Western Civilization since 1600 **Credits: 3**

HIST 204 - United States History to 1877 **Credits: 3**

HIST 205 - United States History since 1877 **Credits: 3**

SOC 231 - Contemporary Social Problems **Credits: 3**

Total Degree Requirements: 121

Sociology Track, Social Science Education, BSED

The department also prepares teachers for secondary school social studies with a concentration in sociology. The program leads to the bachelor of science in education degree. With its emphasis on patterns of social organization in modern industrialized societies, sociology provides a solid foundation for teaching social science at the secondary level. Minors in sociology are available in the following tracks: General Sociology, Human Services, and Sociology of Disability Services.

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog. To student teach, students must have a 3.0 cumulative GPA in the major (social science and history courses). To be licensed to teach education/sociology, majors must apply for social studies education certification.

Liberal Studies: 43-45

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities:

History is fulfilled by courses in the major

Mathematics:

MATH 217 - Probability and Statistics **Credits:** 3 (recommended)

Natural Science:

BIOL 103 - Life on Earth **Credits:** 4 (recommended)

BIOL 104 - Human Biology: How the Human Body Works **Credits:** 4 (recommended)

Social Science:

ECON 121 - Principles of Macroeconomics **Credits:** 3

PSYC 101 - General Psychology **Credits:** 3

SOC 151 - Principles of Sociology **Credits:** 3

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits:** 3

Liberal Studies Electives: 6

PSYC 215 - Developmental Psychology **Credits:** 3

or

PSYC 235 - Social Psychology **Credits:** 3

No courses with SOC prefix

College: 35

3 additional credits of MATH 100-level or above (in addition to Liberal Studies Mathematics) (1)

Preprofessional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits:** 3

EDSP 102 - Educational Psychology **Credits:** 3

Professional Education Sequence:

CHSS 342 - Social Studies Teaching Lab **Credits:** 1
EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits:** 2
EDEX 323 - Instruction of English Language Learners with Special Needs **Credits:** 2
EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits:** 3
EDUC 242 - Pre-student Teaching Clinical Experience I **Credits:** var-1
EDUC 342 - Pre-student Teaching Clinical Experience II **Credits:** 1
EDUC 441 - Student Teaching **Credits:** 5-12
EDUC 442 - School Law **Credits:** 1
EDUC 455 - Teaching of Social Studies in Secondary Schools **Credits:** 3

Major: 21

(2)

Required Sociology Courses:

SOC 231 - Contemporary Social Problems **Credits:** 3
SOC 320 - Sociological Theory **Credits:** 3
SOC 336 - Sociology of the Family **Credits:** 3
SOC 460 - Social Research Methods I **Credits:** 3

Controlled Electives: 3

Social Equity

One course on social equity from the following:

SOC 361 - Social Stratification **Credits:** 3
SOC 362 - Racial and Ethnic Minorities **Credits:** 3
SOC 363 - Sociology of Gender **Credits:** 3

Two Additional Courses: 6

One each from any two of the following three categories:

Deviance and Social Problems:

SOC 269 - Sociology of Deviance **Credits:** 3
SOC 333 - Delinquency and Youth **Credits:** 3
SOC 335 - Alcohol and Drug Abuse **Credits:** 3
SOC 357 - Sociology of Aging and the Life-course **Credits:** 3
SOC 427 - Social Perspectives on Intimate Partner Violence **Credits:** 3
SOC 428 - Child Abuse **Credits:** 3
SOC 452 - Disability and Society **Credits:** 3

Individual in Society:

SOC 251 - Sociology of Human Sexuality **Credits:** 3
SOC 345 - Interpersonal Dynamics **Credits:** 3

Social Organizations and Institutions:

SOC 286
SOC 337 - Society, Globalization, and Risk **Credits:** 3

SOC 340
SOC 348 - Sociology of Work **Credits: 3**
SOC 352 - Sociology of Religion **Credits: 3**
SOC 361 - Social Stratification **Credits: 3**
SOC 362 - Racial and Ethnic Minorities **Credits: 3**
SOC 363 - Sociology of Gender **Credits: 3**
SOC 387 - Social and Cultural Change **Credits: 3**
SOC 421 - Sociology of Mass Media **Credits: 3**
SOC 442 - Medical Sociology **Credits: 3**
SOC 448 - Social Welfare Policy **Credits: 3**
SOC 458 - Political Sociology **Credits: 3**

History Distribution Requirements: 9

HIST 202 - Western Civilization since 1600 **Credits: 3**
HIST 204 - United States History to 1877 **Credits: 3**
HIST 205 - United States History since 1877 **Credits: 3**

Social Science Distribution Requirements: 9

ANTH 211 - Cultural Anthropology **Credits: 3**
GEOG 230 - Cultural Geography **Credits: 3**
PLSC 280 - Comparative Government I: Western Political Systems **Credits: 3**
or
PLSC 285 - Comparative Government II: Non-Western Political Systems **Credits: 3**

Free Electives: 1-3

Total Degree Requirements: 120

(1) Students are required to take an additional 3cr of MATH beyond the Liberal Studies requirements for a total of 6cr, all of which must be 100 level or above.

(2) Courses counted toward Liberal Studies credits do not receive duplicate credits in the major.

Spanish Education K-12, BSED

The following additional requirements for Spanish Education K-12 in the Admission to Teacher Education and Certification Process are required. Please see the remainder of the requirements for all BSEd majors in the "3-Step Process for Teacher Education" in the College of Education and Communications section of this catalog. Students should refer to the Department of Foreign Languages/Spanish website and the *Spanish Education K-12 Student Handbook* for departmental guidelines and detailed explanations of program requirements, including the procedure for taking the OPI and WPT.

Mid-Program Review

During the semester in which students complete EDUC 242 with a "C" or better, they must meet the following departmental requirements:

Complete a departmental/advisory writing proficiency test in Spanish. Students will receive written feedback on their writing performance including areas for improvement that may be necessary to reach the exit requirement of Advanced-Low in writing.

Demonstrate Intermediate-Mid or higher level of oral proficiency in Spanish in a departmental/advisory individual Oral Proficiency Interview (ACTFL).

Satisfactorily complete an interview in English with the Spanish education coordinator, a second faculty member from the Spanish section of the Department of Foreign Languages, and one cooperating teacher in order to assess their ability to interact with others on a professional level.

Have a minimum GPA in Spanish course work of 3.0.

Admission to Student Teaching

Demonstrate Advanced-Low or higher level of oral proficiency in Spanish in an individual Oral Proficiency Interview (ACTFL)—to be completed instead of the PRAXIS II Spanish: Content Knowledge Exam.

Demonstrate Advanced-Low or higher level of written proficiency in Spanish in an individual Writing Proficiency Test (ACTFL)—to be completed instead of the PRAXIS II Spanish: Content Knowledge Exam.

Have a minimum GPA in Spanish course work of 3.0.

Earn a grade of "C" or better in SPAN 330 and SPAN 453.

See requirements leading to teacher certification, titled "3- Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 46-48

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics: 3

MATH 101 - Foundations of Mathematics **Credits:** 3 or higher

Social Science:

ANTH 110 - Contemporary Anthropology **Credits:** 3

PSYC 101 - General Psychology **Credits:** 3

Liberal Studies Electives: 6

MATH course (1)

No courses with SPAN prefix

College: 31

Preprofessional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits:** 3

EDSP 102 - Educational Psychology **Credits:** 3

Professional Education Sequence:

EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits:** 2

EDEX 323 - Instruction of English Language Learners with Special Needs **Credits:** 2

EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits:** 3

EDUC 242 - Pre-student Teaching Clinical Experience I **Credits:** var-1

EDUC 342 - Pre-student Teaching Clinical Experience II **Credits:** 1

EDUC 441 - Student Teaching **Credits:** 5-12

EDUC 442 - School Law **Credits:** 1

EDUC 453 - Teaching of Foreign Languages in the Secondary School **Credits:** 3

Major: 36-40

Study Abroad (2)

Required Courses:

- SPAN 201 - Intermediate Spanish **Credits:** 4 (3)
- SPAN 220 - Intermediate Spanish Conversation **Credits:** 3
- SPAN 230 - Intermediate Spanish Composition and Grammar **Credits:** 3
- SPAN 260 - Introduction to Hispanic Literature **Credits:** 3
- SPAN 330 - Advanced Spanish Composition and Grammar **Credits:** 3
- SPAN 340 - Hispanic Cultures into the 19th Century **Credits:** 3
- SPAN 342 - Spanish Cultures from the 19th Century to the Present **Credits:** 3
- or
- SPAN 344 - Spanish-American Cultures from the 19th Century to the Present **Credits:** 3
- SPAN 350 - Advanced Spanish Conversation **Credits:** 3
- SPAN 390 - Teaching of Elementary Content through the Spanish Language **Credits:** 3
- SPAN 450 - Conversation Forum **Credits:** 3
- SPAN 453 - Spanish Phonetics and Phonemics **Credits:** 3

Controlled Electives:

- Any other 3cr from SPAN 300 or above
- SPAN 362 - Survey of Peninsular Literature **Credits:** 3
- or
- SPAN 364 - Survey of Spanish-American Literature **Credits:** 3
- or
- A 400-level literature course

Free Electives: 1-7

Total Degree Requirements: 120

(1) Students who do not wish to select a MATH course under the Liberal Studies electives must still take a second MATH course (MATH 101 or higher) to fulfill the state requirements.

(2) Students must successfully complete a program of language study in a Spanish-speaking country. This program must, as a minimum, last four weeks and carry 3 or more credits extending beyond the intermediate level. Students may fulfill this requirement by participating in any of the programs primarily administrated by faculty of IUP's Department of Foreign Languages. Students wishing to fulfill this requirement through any other study abroad program must obtain prior approval from the department. Requests for exemptions to this requirement must be initiated by the student in writing and submitted to the department chair.

(3) Students for whom SPAN 201 is waived (by means of placement tests) only need 36 credits in Spanish courses.

Special Education PreK-12, BSED

Completion of the sequence of study in this major leads to Pennsylvania Department of Education special education certifications in preK-8 and 7-12. Students will be prepared to teach persons with intellectual disabilities, autism, developmental disabilities, learning disabilities, brain injuries, emotional/behavioral disorders, physical disabilities, and multiple disabilities. Academic course work and field experiences are integrated within the course of study.

Students entering the program should be aware of the following:

Students **must** complete a fifth year by applying for early admission into to the MEd—Literacy and or Reading Specialist Certification program.

Students must meet all reading specialist certification requirements.

Upon completion of the reading specialist requirements and passing the Special Education PreK-8 and 7-12 exams and Reading Specialist exam, students can then apply for special education certification.

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 151 - Elements of Mathematics I **Credits: 3**

Natural Science:

Laboratory Science sequence required (SCI 105-SCI 107 and SCI 117 recommended)

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 3

MATH 152 - Elements of Mathematics II **Credits: 3** (required)

College: 24

Preprofessional Education Sequence:

EDEX 103 - Special Education Technology **Credits: 3**

EDSP 102 - Educational Psychology **Credits: 3**

Professional Education Sequence:

EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**

EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**

EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**

EDUC 421 - Student Teaching **Credits: 5-6**

EDUC 441 - Student Teaching **Credits: 5-12**

EDUC 442 - School Law **Credits: 1**

Major: 55

Required Courses:

EDEX 111 - Introduction to Exceptional Persons **Credits: 3**

EDEX 114 - Atypical Development in Infants, Children, and Adolescents **Credits: 3**

EDEX 221 - Methods of Teaching Mathematics to Secondary Students with Disabilities **Credits: 2**

EDEX 223 - Reading Methods and Strategies for Students with Disabilities **Credits: 3**

EDEX 321 - Methods of Teaching Language Arts to Persons with Disabilities **Credits: 3**
EDEX 323 - Instruction of English Language Learners with Special Needs **Credits: 2**
EDEX 340 - Introduction to Behavior Management in Special Education **Credits: 3**
EDEX 415 - Preschool Education for Children with Disabilities **Credits: 3**
EDEX 425 - Methods and Curriculum (Mild-Moderate Disabilities) **Credits: 3**
EDEX 435 - Methods and Curriculum—Severe Cognitive Disabilities **Credits: 3**
EDEX 440 - Ethical and Professional Behavior **Credits: 1**
EDEX 458 - Transition Assessment and Planning for Youth with Disabilities **Credits: 3**
EDEX 460 - Family Perspectives on Disability **Credits: 3**
EDEX 469 - Education of Persons with Emotional/Behavioral Disorders, Learning Disabilities or Brain Injury **Credits: 3**
EDEX 478 - Education of Persons with Mental Retardation/Developmental Disabilities and Physical/ Multiple Disabilities **Credits: 3**
MATH 330 - Teaching Mathematics in the Elementary School **Credits: 3**

Reading Specialist: 3

LTCY 600 - Foundations of Literary Instruction **Credits: 3 (1)**

Total Degree Requirements: 123

(1) This course satisfies 3cr of the reading specialist requirements.

Special Education, Early Childhood Education, BSED

This Early Childhood/Special Education (ECSP) program is designed to assist students in becoming highly qualified, competent, and effective teachers of all learners in grades PreK through 4. The program has an emphasis on best practices in both early childhood education and special education. Students in this program will meet the academic requirements for Pennsylvania certification in PreK to grade 4 as well as special education PreK to grade 8.

This program, combining course work in both early childhood education and special education with extensive field experiences, prepares students to be professional educators who are well-qualified to utilize appropriate techniques and strategies to expand all children's cognitive, social, emotional, and physical development. Field experiences will take place in a variety of settings encompassing diverse learning needs as well as learners in birth to grade 3 classrooms, preschool classrooms, K-1 classrooms, and classrooms in grades 2-4.

Admission to this program requires entering students to meet the guidelines for admission to the College of Education and Communications. Additionally, students must achieve a 3.0 GPA to apply for Step 1 of the Teacher Education process, to enroll in major courses, to student teach, and to be recommended for certification. Students must meet the requirements leading to teacher certification as outlined in this catalog.

The Urban Track, within the ECSP program offered by the departments of Professional Studies in Education and Communication Disorders, Special Education, and Disability Services, prepares students for teaching in urban school districts, especially in low-income communities with high minority enrollments where the need for high-quality teachers is great. Course work and field experiences emphasize the historical, economic, political, and socioeconomic contexts of urban schools and seek to develop within future teachers the skills, knowledge base, and sensitivities for working with students whose backgrounds and life experiences often differ in significant ways from their own.

See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Liberal Studies: 43.5

As outlined in the Liberal Studies Requirements with the following specifications:

Humanities:

HIST 196 - Explorations in US History **Credits: 3**

Mathematics:

MATH 151 - Elements of Mathematics I **Credits: 3**

Natural Science:

(3 of 4 required)

SCI 101 - Fundamentals of Physics **Credits: 2.5**
SCI 102 - Fundamentals of Chemistry **Credits: 2.5**
SCI 103 - Fundamentals of Earth and Space Science **Credits: 2.5**
SCI 104 - Fundamentals of Environmental Biology **Credits: 2.5**

Social Science:

GEOG 101 - Environment and Society **Credits: 3**

GEOG 102 - Geography of the United States and Canada **Credits: 3**
or
GEOG 104 - World Geography: Global Context **Credits: 3**
PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 3

MATH 152 - Elements of Mathematics II **Credits: 3**

College: 25

Preprofessional Education Sequence:

ACE 103 - Digital Instructional Technology **Credits: 3**
or
EDEX 103 - Special Education Technology **Credits: 3**
EDSP 102 - Educational Psychology **Credits: 3**

Professional Education Sequence:

EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**
EDUC 242 - Pre-student Teaching Clinical Experience I **Credits: var-1**
EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**
EDUC 442 - School Law **Credits: 1**
EDUC 461 - Student Teaching **Credits: 6**
EDUC 471 - Student Teaching **Credits: 6**

Major: 61

Required Courses:

(1)
ECED 117 - Family, Community, and School Relationships in a Diverse Society **Credits: 2**
ECED 200 - Introduction to Early Childhood Education **Credits: 3**

ECED 221 - Literature for the Young Child and Adolescent **Credits: 3**
ECED 250 - Language Development **Credits: 3**
ECED 280 - Maximizing Learning: Engaging All PreK to Grade 4 Learners **Credits: 3**
ECED 310 - Science, Health, and Safety for All PreK to Grade 4 Learners **Credits: 3**
ECED 351 - Literacy for the Emergent Reader: PreK to Grade 1 Learners **Credits: 3**
ECED 411 - Social Studies for All PreK to Grade 4 Learners **Credits: 3**
ECED 451 - Literacy for the Developing Reader: Grades 2-4 Learners **Credits: 3**
ECSP 112 - Growth and Development: Typical and Atypical **Credits: 3**
ECSP 314 - Creative Experiences and Play for All PreK to Grade 4 Learners **Credits: 3**
ECSP 340 - Introduction to Classroom and Behavior Management **Credits: 3**
EDEX 110 - Introduction to Special Needs PreK to Grade 8 **Credits: 3**
EDEX 269 - Identifying and Understanding Children with Academic and Social Learning Needs from Preschool through Adolescence **Credits: 3**
EDEX 278 - Identifying and Understanding Children with Significant Adaptive Behavior and Learning Needs from Birth through Adolescence **Credits: 3**
EDEX 323 - Instruction of English Language Learners with Special Needs **Credits: 2**
EDEX 424 - Strategic Assessment and Instruction in Expository Texts **Credits: 3**
EDEX 435 - Methods and Curriculum—Severe Cognitive Disabilities **Credits: 3**
EDEX 460 - Family Perspectives on Disability **Credits: 3**
MATH 320 - Mathematics for Early Childhood **Credits: 3**
MATH 330 - Teaching Mathematics in the Elementary School **Credits: 3**

Total Degree Requirements: 129.5

(1) A 3.0 cumulative GPA is required to register in the Teacher Certification Sequence courses.

(*) See requirements leading to teacher certification, titled "3-Step Process for Teacher Education," in the College of Education and Communications section of this catalog.

Vocational-Technical Education, BSED

Liberal Studies: 43-44

As outlined in the Liberal Studies Requirements with the following specifications:

Mathematics:

MATH 151 - Elements of Mathematics I **Credits: 3**

Social Science:

PSYC 101 - General Psychology **Credits: 3**

Liberal Studies Electives: 3

no courses with VOED prefix

College: 17

Professional Educational Sequence:

ACE 103 - Digital Instructional Technology **Credits: 3**

EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits: 2**
EDEX 323 - Instruction of English Language Learners with Special Needs **Credits: 2**
EDEX 458 - Transition Assessment and Planning for Youth with Disabilities **Credits: 3**
EDSP 102 - Educational Psychology **Credits: 3**
EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**
EDUC 442 - School Law **Credits: 1**

Major: 25

Required Courses:

VOED 101 - Introduction to Career and Technical Education **Credits: 1**
VOED 102 - Instructional Planning in the Career and Technical Classroom **Credits: 2**
VOED 103 - Strategies for Teaching Career and Technical Education **Credits: 3**
VOED 201 - Making Accommodations for Students with Special Needs in the Career and Technical Classroom **Credits: 1**
VOED 202 - Industry Linkages for Career and Technical Programs **Credits: 3**
VOED 203 - Incorporating Reading and Communications Strategies in the Career and Technical Classroom **Credits: 3**
VOED 301 - Integrating Math and Science in Career and Technical Education **Credits: 3**
VOED 302 - Career Education in the Career and Technical Classroom **Credits: 3**
VOED 404 - Research in Career and Technical Education **Credits: 3**
VOED 405 - Professional Seminar in Career and Technical Education **Credits: 3**

Other Requirements: 24

Free Electives: 9-11

Total Degree Requirements: 120

Bachelor of Fine Arts

Art Studio, BFA

Liberal Studies: 43-44

As outlined in Liberal Studies Requirements with the following specifications:

Fine Arts:

ARHI 205 - Ancient to Medieval Art **Credits: 3**

Mathematics: 3

Liberal Studies Elective: 3

ARHI 207 - Renaissance through Modern Art **Credits: 3**
No courses with ART prefix

Major:

Foundation Required: 12

- ART 111 - Figure Drawing **Credits: 3**
- ART 112 - Fundamentals of Drawing **Credits: 3**
- ART 113 - Three-Dimensional Design **Credits: 3**
- ART 114 - Color and Two-Dimensional Design **Credits: 3**

Beginning Studio Electives: 15

Five of the following nine courses:

- ART 211 - Painting **Credits: 3**
- ART 213 - Woodworking: Function and Form **Credits: 3**
- ART 214 - Ceramics **Credits: 3**
- ART 215 - Sculpture **Credits: 3**
- ART 216 - Jewelry and Metals **Credits: 3**
- ART 217 - Print Media **Credits: 3**
- ART 218 - Introduction to Graphic Design **Credits: 3**
- ART 219
- ART 281 - Special Topics **Credits: 1-3** (may be used only once)

Art History Required: 6

- ARHI 100 - Arts of the 20th Century **Credits: 3**
- Controlled ARHI Elective: One course from any 300-400 level ARHI prefix

Intermediate/Advanced Studio Required: 27

(Select one of two tracks.)

Art Studio Track:

Studio areas of study include ceramics, painting, woodworking, drawing, fibers, sculpture, print media, jewelry and metals, and internship. Select from:

- ART 421 - Advanced Drawing **Credits: 3**
- ART 451 - Advanced Woodworking: Function and Form **Credits: 3**
- ART 452 - Advanced Ceramics **Credits: 3**
- ART 453 - Advanced Sculpture **Credits: 3**
- ART 454 - Advanced Painting **Credits: 3**
- ART 457 - Advanced Print Media **Credits: 3-6**
- ART 459
- ART 460 - Advanced Jewelry and Metals **Credits: 3**
- ART 481 - Special Topics **Credits: 1-3**
- ART 493 - Internship **Credits: 3-12**

Graphic Design Track:

Studio area of study includes graphic design and internship. Select from:

- ART 356 - Intermediate Graphic Design II **Credits: 3**
- ART 455 - Modeling and Animation **Credits: 3-6**
- ART 456 - Advanced Web and Interactive Design **Credits: 3-6**
- ART 481 - Special Topics **Credits: 1-3**
- ART 493 - Internship **Credits: 3-12**

Primary Studio Emphasis: 18

Select any 300-400 level courses from one studio area listed in track options above. (2, 3)

Synthesis Studio: 9

Art Studio Track majors select 300-400 level courses listed within track options above that are outside students' primary studio area. These studio courses must relate to one's primary studio area emphasis conceptually and/or technically. Graphic Design Track majors may select 300-400 level graphic design courses or 300-400 level courses from the Art Studio Track if they relate conceptually and/or technically. (2, 3, 4)

Intermediate/Advanced Studio Electives: 9

Select any 300-400 level art studio courses. (1, 2)

Senior Thesis and Professional Practicum: 3

ART 400 - Professional Practices **Credits: 3**

Free Electives: 4-5

Total Degree Requirements: 120

See advisory paragraph "Timely Completion of Degree Requirements" in the section on Requirements for Graduation.

- (1) Student must achieve a cumulative 2.5 GPA and earn a "C" or better in all ART and ARHI courses to graduate.
- (2) Students must complete 3cr within an advanced studio before permission will be granted to enroll in the 6cr component of the advanced level. Permission of the instructor is a prerequisite to all 6cr advanced courses.
- (3) Inclusion of internship credits toward any portion of fulfillment of degree requirements must be approved by the departmental chair and student's major advisor. Approval must be obtained in writing before enrollment.
- (4) Synthesis studio courses must be approved by academic advisor.

Music Performance, BFA

Liberal Studies: 43

As outlined in the Liberal Studies Requirements with the following specifications:

Fine Arts:

MUHI 102 - Music and Literature Survey **Credits: 3**

Humanities Literature:

Fulfilled by

MUHI 102 - Music and Literature Survey **Credits: 3**

Mathematics:

MATH 101 - Foundations of Mathematics **Credits:** 3 or other 3cr Liberal Studies Mathematics

Natural Science: Option II recommended

See requirements for **Natural Science: Option II** of the Liberal Studies Requirements **Knowledge Area : Natural Science: One Option** in the *Graduation Requirements* section of this catalog.

PHYS 105 - The Physics of Light and Sound **Credits:** 3 recommended

Social Science:

PSYC 101 - General Psychology **Credits:** 3

Liberal Studies Electives: 6

MUHI 301 - Music History I **Credits:** 3

MUHI 302 - Music History II **Credits:** 3

No courses with MUSC prefix

Major: 54-56

Required Courses:

APMU (Primary) Applied Music I-VIII (4cr each) **Credits:** 30-32 (1)

APMU 427 - Capstone Jury: Primary Instrument **Credits:** 0

MUSC 111 - Theory Skills I **Credits:** 2

MUSC 112 - Theory Skills II **Credits:** 2

MUSC 115 - Theory I **Credits:** 3

MUSC 116 - Theory II **Credits:** 3

MUSC 180 - Technology for General Musicianship **Credits:** 2

MUSC 211 - Theory Skills III **Credits:** 2

MUSC 212 - Theory Skills IV **Credits:** 2

MUSC 215 - Theory III **Credits:** 3

MUSC 216 - Theory IV **Credits:** 3

MUSC 311 - Fundamentals of Conducting **Credits:** 2

MUSC 475 - Music Lab **Credits:** 0 (8 semesters of recital attendance)

Controlled Electives: 21-23

All Concentrations

MUSC 120-MUSC 140 Music Ensembles (2) **Credits:** 8

Electives with APMU, MUSC (but not 120-140), or MUHI prefix **Credits:** 0-11

Keyboard Majors

MUSC 217 - Keyboard Harmony **Credits:** 3

MUSC 405 - Piano Pedagogy **Credits:** 3

Voice Majors

APMU 126 - Piano Proficiency Level I **Credits: 0**
MUSC 153 - Class Piano I **Credits: 1**
MUSC 154 - Class Piano II **Credits: 1**
MUSC 351 - Italian Diction and Literature **Credits: 1**
MUSC 353 - French Diction and Literature **Credits: 1**
MUSC 354 - German Diction and Literature **Credits: 1**
MUSC 406 - Vocal Pedagogy **Credits: 3**
Foreign language course at 100-level or above (critical languages excluded)

String Majors

APMU 126 - Piano Proficiency Level I **Credits: 0**
MUSC 153 - Class Piano I **Credits: 1**
MUSC 154 - Class Piano II **Credits: 1**
MUSC 403 - Practicum in String Pedagogy **Credits: 0/1**
MUSC 404 - String Pedagogy **Credits: 2**

Wind and Percussion Majors

APMU 126 - Piano Proficiency Level I **Credits: 0**
APMU 480 - Wind and Percussion Pedagogy **Credits: 2**
MUSC 153 - Class Piano I **Credits: 1**
MUSC 154 - Class Piano II **Credits: 1**

Composition Majors

MUSC 217 - Keyboard Harmony **Credits: 3**
MUSC 315 - Theory V **Credits: 3**
MUSC 417 - Orchestration **Credits: 3**

Total Degree Requirements: 120

(1) Voice, keyboard, and string majors will take eight semesters of 4cr lessons (32cr). Wind and percussion majors will take seven semesters of 4cr lessons and one semester of 2cr lessons (30cr). Composition majors will take up to 16cr of composition lessons.

(2) Students are required to participate in ensembles for five hours a week each semester for eight semesters

Minor

Accounting Minor

(1)

(for business majors and students majoring in computer science, criminology, economics, employment and labor relations, fashion merchandising, hospitality management, and sport administration)

Prescribed Liberal Studies:

Mathematics:

MATH 214 - Probability and Statistics for Business Majors **Credits: 3**

or

MATH 217 - Probability and Statistics **Credits: 3**

Social Science:

ECON 121 - Principles of Macroeconomics **Credits: 3**

Liberal Studies Elective:

COSC 101 - Computer Literacy **Credits: 3**

or

IFMG 101 - Computer Literacy **Credits: 3**

Courses: 12

ACCT 201 - Accounting Principles I **Credits: 3**

ACCT 202 - Accounting Principles II **Credits: 3**

ACCT 304 - Intermediate Accounting I **Credits: 3**

ACCT 305 - Intermediate Accounting II **Credits: 3**

Two courses from the following: 6

ACCT 311 - Cost Accounting **Credits: 3**

ACCT 401 - Advanced Accounting **Credits: 3**

ACCT 421 - Federal Tax I **Credits: 3**

or

ACCT 422 - Federal Tax II **Credits: 3**

ACCT 431 - Auditing **Credits: 3**

or

ACCT 432 - Forensic and Internal Auditing **Credits: 3**

Total Minor Requirements: 18

(1) Minor course requirements must be completed with a minimum cumulative GPA of 2.0.

Animal Behavior Minor

Animal Behavior is the study of how living organisms interact with their environment and each other. This minor is intended for our students to gain knowledge of key concepts and principles in animal behavior, cognition and evolutionary relationships. This minor will provide our students with an option beyond veterinary medicine, such as graduate school, further training as veterinary assistants, wildlife technicians, or working in government and private institutions, zoos, and conservation groups.

Required Courses: 6

BIOL 220 - General Zoology **Credits: 3**

BIOL 455 - Animal Behavior **Credits: 3**

Controlled Elective Courses: 12

(1,2)

BIOL 205 - Ecological Methods **Credits:** 3
BIOL 261 - Ornithology **Credits:** 3
BIOL 272 - Conservation of Plant and Animal Resources **Credits:** 3
BIOL 352 - Comparative Animal Physiology **Credits:** 3
BIOL 362 - Ecology **Credits:** 3
BIOL 425 - Herpetology **Credits:** 3
BIOL 431 - Ichthyology **Credits:** 3

BIOL 450 - Field Biology at Pymatuning Laboratory of Ecology **Credits:** 4
or
BIOL 490 - Field Studies in Biology **Credits:** 1-4

BIOL 451 - Evolutionary Biology **Credits:** 3
BIOL 475 - Mammalogy **Credits:** 3
BIOL 481 - Special Topics **Credits:** 1-3

Total Minor Requirements: 18

(1) Other appropriate BIOL courses at 200 level and above may be substituted with permission of the advisor and the Biology department chair in advance of taking the course.

(2) No more than two of majors courses can apply (excluding prerequisite, liberal studies, cognate or college core courses) towards Minor.

Anthropology Minor

A minor in Anthropology allows students to apply the benefits of broad cross-cultural training to their chosen field of study. This minor is particularly helpful for students interested in international or global careers, or those who wish to apply the lessons of the past to their future pursuits. The 18-credit minor allows the flexibility to select the classes that best fit the student's interest.

Required Course:

ANTH 110 - Contemporary Anthropology **Credits:** 3

Controlled Requirements: 3

One core course from the following:

ANTH 211 - Cultural Anthropology **Credits:** 3
ANTH 222 - Biological Anthropology **Credits:** 3
ANTH 233 - Language and Culture **Credits:** 3
ANTH 244 - Basic Archaeology **Credits:** 3

Controlled Electives: 12

Four additional courses in ANTH with at least 6cr 300 level or higher

Total Minor Requirements: 18

Applied Statistics Minor

The Applied Statistics minor consists of 18 credits in mathematics and statistics. It is designed for students who want to apply statistical methodology to investigate real-world problems. The use of statistical software and interpretation of results is heavily emphasized. The minor is created for students from a variety of majors, including those in the natural sciences, social sciences, and business.

Required Courses: 9

MATH 214 - Probability and Statistics for Business Majors **Credits: 3**
or
MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**
or
MATH 217 - Probability and Statistics **Credits: 3**
MATH 411 - Univariate Data Analysis **Credits: 3**
MATH 412 - Multivariate Statistics **Credits: 3**

Controlled Electives: 9

Select at least 9cr from the following:

MATH 115 - Applied Mathematics for Business **Credits: 3**
or
MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**
or
MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3**

MATH 363 - Mathematical Statistics I **Credits: 3**
MATH 364 - Mathematical Statistics II **Credits: 3**
CRIM 306 - Criminological Research Methods **Credits: 3**
QBUS 215 - Business Statistics **Credits: 3**
ECON 356 - Introduction to Econometrics **Credits: 3**
PSYC 290 - Research Design and Analysis I **Credits: 4**
PSYC 291 - Research Design and Analysis II **Credits: 4**

or

Any statistics or quantitative methods course approved by the Applied Statistics advisor. Students majoring in mathematics cannot select MATH 115, MATH 121, or MATH 125 as a controlled elective

Total Minor Requirements: 18

Art History Minor

Required Courses: 9

ARHI 205 - Ancient to Medieval Art **Credits: 3**
ARHI 207 - Renaissance through Modern Art **Credits: 3**
ARHI 224 - Introduction to Asian Art **Credits: 3**
Three additional courses with an ARHI prefix except ARHI 101

Total Minor Requirements: 18

Art Studio Minor

Three Courses from the Following: 9

ART 111 - Figure Drawing **Credits: 3**
ART 112 - Fundamentals of Drawing **Credits: 3**
ART 113 - Three-Dimensional Design **Credits: 3**
ART 114 - Color and Two-Dimensional Design **Credits: 3**

ART 211 - Painting **Credits: 3**
ART 213 - Woodworking: Function and Form **Credits: 3**
ART 214 - Ceramics **Credits: 3**
ART 215 - Sculpture **Credits: 3**
ART 216 - Jewelry and Metals **Credits: 3 (1)**
ART 217 - Print Media **Credits: 3**
ART 218 - Introduction to Graphic Design **Credits: 3 (1)**
ART 281 - Special Topics **Credits: 1-3**

Three Courses from the Following: 9

ART 356 - Intermediate Graphic Design II **Credits: 3**
ART 421 - Advanced Drawing **Credits: 3**
ART 451 - Advanced Woodworking: Function and Form **Credits: 3**
ART 452 - Advanced Ceramics **Credits: 3**
ART 453 - Advanced Sculpture **Credits: 3**
ART 454 - Advanced Painting **Credits: 3**
ART 455 - Modeling and Animation **Credits: 3-6**
ART 456 - Advanced Web and Interactive Design **Credits: 3-6**
ART 457 - Advanced Print Media **Credits: 3-6**
ART 460 - Advanced Jewelry and Metals **Credits: 3**
ART 481 - Special Topics **Credits: 1-3**

Total Minor Requirements: 18

- (1) Courses have prerequisites. Check the catalog for details and discuss course of study with minor advisor. The instructor may choose to waive the prerequisite for art studio minors.
- (2) Art Minors are permitted to repeat any advanced 400-level advanced studio course multiple times to fulfill the 9cr requirement.
- (3) Art Minors are not permitted to take section 002 of any 400-level advanced studio course for six credits.

Asian Studies Minor

Alan T. Baumler, Coordinator

(1, 2, 3)

The Committee of Asian Studies offers an interdisciplinary major and a minor to provide students with the opportunity to increase their knowledge of the world's largest, most populous, and most diverse continent. Students enrolled in the Asian studies major or minor will find that the course offerings furnish excellent preparation for careers in business, government, journalism and public relations, and teaching.

To minor in Asian studies, students must complete a minimum of 18 credits, no more than 6 of which may have the prefix of their major. ASIA 200 is required of all Asian studies minors. At least 12 credits must come from Category A (Exclusively Asia-Focused); 3 credits of an Asian language course may apply to the Category A requirement. No more than 3 credits from Category B (Substantially Asia-Focused) may be applied to the minor.

Required Course: 3

ASIA 200 - Introduction to Asian Studies **Credits: 3**

Electives 15

The remaining 15 credits should come from the list of Category A, exclusively Asia-focused classes from the major. Students may, but do not have to, apply up to 3cr of an Asian Language class and/or 3cr of a Category B class.

Total Minor Requirements: 18

(1) The subject matter varies in rotating topic courses (e.g., HIST 497, RLST 485 etc.); and special topics courses (i.e. classes numbered 281 and 481). When concerned with Asian Studies, these courses may be applied to either Category A or Category B with the approval of the Asian Studies Committee.

(2) With the program coordinator's approval, 3cr of an internship (493) may be counted toward the Asian Studies minor.

(3) Courses need to be in at least two different prefixes.

For further information on the Asian Studies programs, contact the College of Humanities and Social Sciences, 201 McElhaney Hall, 724-357-2280.

Biochemistry Minor

Total credits will depend on the controlled electives used (9cr minimum required to 12cr for three 4cr electives).

Required Courses: 8

- BIOC 301 - Foundations of Biochemistry **Credits:** 3 (1a)
- BIOC 402 - Advanced Biochemistry **Credits:** 3
- BIOC 311 - Biochemistry Laboratory I **Credits:** 1 (1a)
- BIOC 412 - Advanced Biochemistry Laboratory **Credits:** 1

Other Requirements: 10-12

At least three controlled electives from following: (1)

- BIOC 480 - Biochemistry Seminar I **Credits:** 1
- BIOC 481 - Special Topics in Biochemistry **Credits:** 1-3
- BIOC 490 - Biochemistry Seminar II **Credits:** 1
- BIOL 203 - Principles of Genetics and Development **Credits:** 4 (1b)
- BIOL 250 - Principles of Microbiology **Credits:** 4 (1b, d)
- BIOL 352 - Comparative Animal Physiology **Credits:** 3 (1d)
- BIOL 364 - Immunology **Credits:** 3 (1d)
- BIOC 401 - Laboratory Methods in Biology and Biotechnology **Credits:** 3 (1d)
- or
- BIOL 401 - Laboratory Methods in Biology and Biotechnology **Credits:** 3 (1d)
- CHEM 332 - Organic Chemistry II **Credits:** 4 (1c)
- CHEM 332 - Organic Chemistry II **Credits:** 4 (1c, d)
- CHEM 325 - Analytical Chemistry I **Credits:** 4

Total Minor Requirements: 18-20

(1) Or other 200-level or higher biology or chemistry courses with permission of chairperson of offering department. A minimum of 10cr is required.

- BIOL 202 and CHEM 332 are prerequisites.
- Required for biology major
- Required for chemistry major
- These courses have prerequisites not needed for the required courses.

Biology Minor

The Biology minor is intended for students in the Nursing and Allied Health or Natural Science programs. Not for Biology majors. The Biomedical Science minor is intended for students interested in the health field, including Biology majors as long as there is a maximum of two course overlap between Majors and Minors courses.

Required Courses: 8

(1, 2)

- BIOL 103 - Life on Earth **Credits: 4**
- BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**
- BIOL 106 - Human Genetics and Health **Credits: 3**
- BIOL 116 - Human Genetics and Health Laboratory **Credits: 1**

Additional BIOL courses: 10

(3,4)

Other Requirements:

- Student must have at least a 2.0 GPA in all BIOL courses for the minor.
- Student must take at least 6cr of biology courses at IUP.
- Must have permission of Biology Department chairperson.

Total Minor Requirements: 18

- (1) Student must take two of the three required courses.
- (2) Two of the following courses may be substituted for the required courses: BIOL 201, BIOL 202 or BIOL 203.
- (3) With approval of department chairperson.
- (4) At least six of the 10 required additional BIOL cr must come from 300-level or higher courses.

Biomedical Science Minor

Minor track intended for students interested in the health field, including Biology majors as long as there is maximum of two course overlap between Majors and Minors courses.

Required Courses: 12

- BIOL 150 - Human Anatomy **Credits: 4**
- BIOL 240 - Human Physiology **Credits: 4**
- BIOL 241 - Introductory Medical Microbiology **Credits: 4**

Controlled Electives: 6

(1)

6 credits from the following:

- BIOL 310 - Applied Entomology and Zoonoses **Credits: 3**

BIOL 323 - Introduction to Toxicology and Risk Assessment **Credits: 3**
BIOL 364 - Immunology **Credits: 3**
BIOL 405 - The Biology of the Cell - Critical Thinking **Credits: 2**
BIOL 410 - Molecular Biology Topics **Credits: 3**
BIOL 460
BIOL 466 - Principles of Virology **Credits: 3**
BIOL 477 - Neurobiology **Credits: 3**

Total Minor Requirements: 18

(1) Other BIOL content courses with the approval of the minor advisor.

Business Administration (for Nonbusiness Majors) Minor

The ECOBIT offers, as a joint effort of its departments, a 21-credit minor for nonbusiness majors. The program is designed to give nonbusiness majors a general background in business with 12 credits of prescribed Liberal Studies courses and 21 credits of required business courses.

Prescribed Liberal Studies:

Mathematics:

MATH 214 - Probability and Statistics for Business Majors **Credits: 3**
or
MATH 217 - Probability and Statistics **Credits: 3**

Social Science:

ECON 121 - Principles of Macroeconomics **Credits: 3**

Liberal Studies Electives:

COSC 101 - Computer Literacy **Credits: 3**
or
IFMG 101 - Computer Literacy **Credits: 3**
or
IFMG 110 - Business Spreadsheet Computing **Credits: 3**
ECON 122 - Principles of Microeconomics **Credits: 3**

Required Business Courses: 15

ACCT 201 - Accounting Principles I **Credits: 3**
ACCT 202 - Accounting Principles II **Credits: 3**
FIN 310 - Fundamentals of Finance **Credits: 3**
MGMT 310 - Principles of Management **Credits: 3**
MKTG 320 - Principles of Marketing **Credits: 3**

Other Requirements: 6

Two of the following courses with advisement:

BCOM 321 - Business and Interpersonal Communications **Credits: 3**
BLAW 235 - Legal Environment of Business **Credits: 3**

IFMG 300 - Information Systems: Theory and Practice **Credits: 3**
MGMT 330 - Production and Operations Management **Credits: 3**

Total Minor Requirements: 21

Business Administration (for Nonbusiness Majors) Minor

The ECOBIT offers, as a joint effort of its departments, a 21-credit minor for nonbusiness majors. The program is designed to give nonbusiness majors a general background in business with 12 credits of prescribed Liberal Studies courses and 21 credits of required business courses.

Prescribed Liberal Studies:

Mathematics:

MATH 214 - Probability and Statistics for Business Majors **Credits: 3**
or
MATH 217 - Probability and Statistics **Credits: 3**

Social Science:

ECON 121 - Principles of Macroeconomics **Credits: 3**

Liberal Studies Electives:

COSC 101 - Computer Literacy **Credits: 3**
or
IFMG 101 - Computer Literacy **Credits: 3**
or
IFMG 110 - Business Spreadsheet Computing **Credits: 3**

ECON 122 - Principles of Microeconomics **Credits: 3**

Required Business Courses: 15

ACCT 201 - Accounting Principles I **Credits: 3**
ACCT 202 - Accounting Principles II **Credits: 3**
FIN 310 - Fundamentals of Finance **Credits: 3**
MGMT 310 - Principles of Management **Credits: 3**
MKTG 320 - Principles of Marketing **Credits: 3**

Other Requirements: 6

Two of the following courses with advisement:

BCOM 321 - Business and Interpersonal Communications **Credits: 3**
BLAW 235 - Legal Environment of Business **Credits: 3**
IFMG 300 - Information Systems: Theory and Practice **Credits: 3**
MGMT 330 - Production and Operations Management **Credits: 3**

Total Minor Requirements: 21

Chemistry Minor

Required Courses:

CHEM 111 - General Chemistry I **Credits: 4**

or

CHEM 113 - Advanced General Chemistry I **Credits: 4**

CHEM 112 - General Chemistry II **Credits: 4**

or

CHEM 114 - Advanced General Chemistry II **Credits: 4**

CHEM 231 - Organic Chemistry I **Credits: 4**

At Least 7cr from the Following:

CHEM 314 - Inorganic Chemistry **Credits: 4**

CHEM 332 - Organic Chemistry II **Credits: 4**

or

Any CHEM or BIOC course(s) at the 300 level or above

Total Minor Requirements: 19

Child and Adult Advocacy Studies (CAAST) for Majors other than Psychology and Sociology Minor

Child and Adult Advocacy Studies is an 18-credit interdisciplinary undergraduate minor. It is designed for current undergraduate students enrolled at IUP. It provides mandated reporters and first responders in criminology, education, family studies, medicine, nursing, psychology, public health, sociology, social work, and other disciplines with evidence-based, culturally relevant knowledge and skills to improve the outcomes for victims and perpetrators of interpersonal violence across the lifespan. A student's major determines which CAAST minor s/he pursues: one minor has been designed for Psychology majors, one minor has been designed for Sociology majors, and one minor has been designed for all other majors.

Required Courses:

PSYC 101 - General Psychology **Credits: 3 (1)**

PSYC 322 - Violence Across the Life Span **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3 (1)**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3 (1)**

SOC 391 - Foundations of Sociological Practice **Credits: 3**

SOC 392 - Clinical Sociological Practice **Credits: 3**

Controlled Electives: 9

(2) Three additional courses from the following:

PSYC 313 - Non-normative Development in Adulthood (CAAST) **Credits: 3**

or

PSYC 314 - Child and Adolescent Psychopathology (CAAST) **Credits: 3**

PSYC 332 - Community Psychology and Prevention Science (CAAST) **Credits: 3**

PSYC 380 - Gender and Violence **Credits: 3**

SOC 357 - Sociology of Aging and the Life-course **Credits: 3**

SOC 427 - Social Perspectives on Intimate Partner Violence **Credits: 3**

SOC 428 - Child Abuse **Credits: 3**

Total Minor Requirements: 18

(1) Credits counted in Liberal Studies, not in the minor.

(2) With the aid of a CAAST minor advisor, students will select classes (a) from both PSYC and SOC, and (b) that will cover the spectrum of violence across the lifespan.

Child and Adult Advocacy Studies (CAAST) for Majors Other than Psychology and Sociology Minor

Advisor: Pearl Berman

Child and Adult Advocacy Studies is an 18-credit interdisciplinary undergraduate minor. It is designed for current undergraduate students enrolled at IUP. It provides mandated reporters and first responders in criminology, education, family studies, medicine, nursing, psychology, public health, sociology, social work, and other disciplines with evidence-based, culturally relevant knowledge and skills to improve the outcomes for victims and perpetrators of interpersonal violence across the lifespan. A student's major determines which CAAST minor s/he pursues: one minor has been designed for Psychology majors, one minor has been designed for Sociology majors, and one minor has been designed for all other majors.

Required Courses:

PSYC 101 - General Psychology **Credits:** 3 (1)

PSYC 322 - Violence Across the Life Span **Credits:** 3

SOC 151 - Principles of Sociology **Credits:** 3 (1)

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits:** 3 (1)

SOC 391 - Foundations of Sociological Practice **Credits:** 3

SOC 392 - Clinical Sociological Practice **Credits:** 3

Controlled Electives: 9

(2)

Three additional courses from the following:

PSYC 313 - Non-normative Development in Adulthood (CAAST) **Credits:** 3

or

PSYC 314 - Child and Adolescent Psychopathology (CAAST) **Credits:** 3

PSYC 332 - Community Psychology and Prevention Science (CAAST) **Credits:** 3

PSYC 380 - Gender and Violence **Credits:** 3

SOC 357 - Sociology of Aging and the Life-course **Credits:** 3

SOC 427 - Social Perspectives on Intimate Partner Violence **Credits:** 3

SOC 428 - Child Abuse **Credits:** 3

Total Minor Requirements: 18

(1) Credits counted in Liberal Studies, not in the minor.

(2) With the aid of a CAAST minor advisor, students will select classes (a) from both PSYC and SOC, and (b) that will cover the spectrum of violence across the lifespan.

Child and Adult Advocacy Studies (CAAST) for Psychology Majors Minor

(1, 2)

Child and Adult Advocacy Studies is an 18-credit interdisciplinary undergraduate minor. It is designed for current undergraduate students enrolled at IUP. It provides mandated reporters and first responders in criminology, education, family studies, medicine, nursing, psychology, public health, sociology, social work, and other disciplines with evidence-based, culturally relevant knowledge and skills to improve the outcomes for victims and perpetrators of interpersonal violence across the lifespan. A student's major determines which CAAST minor s/he pursues: one minor has been designed for Psychology majors, one minor has been designed for Sociology majors, and one minor has been designed for all other majors.

Required Courses:

PSYC 101 - General Psychology **Credits:** 3 (3)

PSYC 322 - Violence Across the Life Span **Credits:** 3

SOC 151 - Principles of Sociology **Credits:** 3 (3)

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits:** 3 (3)

SOC 391 - Foundations of Sociological Practice **Credits:** 3

SOC 392 - Clinical Sociological Practice **Credits:** 3

Controlled Electives:

Psychology Course

One additional PSYC Course from the following:

PSYC 313 - Non-normative Development in Adulthood (CAAST) **Credits:** 3

PSYC 314 - Child and Adolescent Psychopathology (CAAST) **Credits:** 3

PSYC 332 - Community Psychology and Prevention Science (CAAST) **Credits:** 3

PSYC 380 - Gender and Violence **Credits:** 3

PSYC 493 - Psychological Practicum **Credits:** 1-12

Sociology Courses

Two additional SOC Courses from the following:

SOC 357 - Sociology of Aging and the Life-course **Credits:** 3

SOC 427 - Social Perspectives on Intimate Partner Violence **Credits:** 3

SOC 428 - Child Abuse **Credits:** 3

Total Minor Requirements: 18

(1) Students majoring in Sociology/Human Services Track are not eligible to take this minor; instead, they must take the CAAST minor that has been designed for students pursuing a major in Sociology/Human Services Track.

(2) Students who are Psychology majors can only have two PSYC courses that count for their major and the CAAST minor.

(3) Credits counted in Liberal Studies, not in the minor.

Child and Adult Advocacy Studies (CAAST) for Psychology Majors Minor

(1, 2)

Advisor: Pearl Berman

Child and Adult Advocacy Studies is an 18-credit interdisciplinary undergraduate minor. It is designed for current undergraduate students enrolled at IUP. It provides mandated reporters and first responders in criminology, education, family studies, medicine, nursing, psychology, public health, sociology, social work, and other disciplines with evidence-based, culturally relevant knowledge and skills to improve the outcomes for victims and

perpetrators of interpersonal violence across the lifespan. A student's major determines which CAAST minor s/he pursues: one minor has been designed for Psychology majors, one minor has been designed for Sociology majors, and one minor has been designed for all other majors.

Required Courses:

PSYC 101 - General Psychology **Credits: 3 (3)**

PSYC 322 - Violence Across the Life Span **Credits: 3**

SOC 151 - Principles of Sociology **Credits: 3 (3)**

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3 (3)**

SOC 391 - Foundations of Sociological Practice **Credits: 3**

SOC 392 - Clinical Sociological Practice **Credits: 3**

Controlled Electives:

PSYC Course

One additional PSYC course from the following:

PSYC 313 - Non-normative Development in Adulthood (CAAST) **Credits: 3**

PSYC 314 - Child and Adolescent Psychopathology (CAAST) **Credits: 3**

PSYC 332 - Community Psychology and Prevention Science (CAAST) **Credits: 3**

PSYC 380 - Gender and Violence **Credits: 3**

PSYC 493 - Psychological Practicum **Credits: 1-12**

SOC Courses

Two additional SOC courses from the following:

SOC 357 - Sociology of Aging and the Life-course **Credits: 3**

SOC 427 - Social Perspectives on Intimate Partner Violence **Credits: 3**

SOC 428 - Child Abuse **Credits: 3**

Total Minor Requirements: 18

(1) Students majoring in Sociology/Human Services Track are not eligible to take this minor; instead, they must take the CAAST minor that has been designed for students pursuing a major in Sociology/Human Services Track.

(2) Students who are Psychology majors can only have two PSYC courses that count for their major and the CAAST minor.

(3) Credits counted in Liberal Studies, not in the minor.

Child and Adult Advocacy Studies (CAAST) for Sociology/Human Services Track majors Minor

(1, 2, 3)

Child and Adult Advocacy Studies is an 18-credit interdisciplinary undergraduate minor. It is designed for current undergraduate students enrolled at IUP. It provides mandated reporters and first responders in criminology, education, family studies, medicine, nursing, psychology, public health, sociology, social work, and other disciplines with evidence-based, culturally relevant knowledge and skills to improve the outcomes for victims and perpetrators of interpersonal violence across the lifespan. A student's major determines which CAAST minor s/he pursues: one minor has been designed for Psychology majors, one minor has been designed for Sociology majors, and one minor has been designed for all other majors.

Required Courses:

PSYC 101 - General Psychology **Credits:** 3 (4)

PSYC 313 - Non-normative Development in Adulthood (CAAST) **Credits:** 3

or

PSYC 314 - Child and Adolescent Psychopathology (CAAST) **Credits:** 3

PSYC 322 - Violence Across the Life Span **Credits:** 3

PSYC 332 - Community Psychology and Prevention Science (CAAST) **Credits:** 3

PSYC 380 - Gender and Violence **Credits:** 3

SOC 151 - Principles of Sociology **Credits:** 3 (4)

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits:** 3 (4)

Controlled Electives: 6

Two courses from the following:

SOC 357 - Sociology of Aging and the Life-course **Credits:** 3

SOC 427 - Social Perspectives on Intimate Partner Violence **Credits:** 3

SOC 428 - Child Abuse **Credits:** 3

Total Minor Requirements: 18

- (1) Students majoring in Psychology are not eligible to take this minor; instead, they must take the CAAST minor that has been designed for students pursuing a major in Psychology.
- (2) Students who are Sociology/Human Services Track majors can only have two SOC courses that count for their major and the CAAST minor.
- (3) Sociology/General Track majors who wish to get a CAAST minor must take SOC 391 and SOC 392 as part of their free electives.
- (4) Credits counted in Liberal Studies, not in the minor.

Child and Adult Advocacy Studies (CAAST) for Sociology/Human Services Track Majors Minor

Advisor: Pearl Berman

(1, 2, 3)

Child and Adult Advocacy Studies is an 18-credit interdisciplinary undergraduate minor. It is designed for current undergraduate students enrolled at IUP. It provides mandated reporters and first responders in criminology, education, family studies, medicine, nursing, psychology, public health, sociology, social work, and other disciplines with evidence-based, culturally relevant knowledge and skills to improve the outcomes for victims and perpetrators of interpersonal violence across the lifespan. A student's major determines which CAAST minor s/he pursues: one minor has been designed for Psychology majors, one minor has been designed for Sociology majors, and one minor has been designed for all other majors.

Required Courses:

PSYC 101 - General Psychology **Credits:** 3 (4)

PSYC 313 - Non-normative Development in Adulthood (CAAST) **Credits:** 3

or

PSYC 314 - Child and Adolescent Psychopathology (CAAST) **Credits:** 3

PSYC 322 - Violence Across the Life Span **Credits:** 3

PSYC 332 - Community Psychology and Prevention Science (CAAST) **Credits:** 3

PSYC 380 - Gender and Violence **Credits:** 3

SOC 151 - Principles of Sociology **Credits:** 3 (4)

or

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits:** 3 (4)

Controlled Electives: 6

Two courses from the following:

SOC 357 - Sociology of Aging and the Life-course **Credits:** 3

SOC 427 - Social Perspectives on Intimate Partner Violence **Credits:** 3

SOC 428 - Child Abuse **Credits:** 3

Total Minor Requirements: 18

(1) Students majoring in Psychology are not eligible to take this minor; instead, they must take the CAAST minor that has been designed for students pursuing a major in Psychology.

(2) Students who are Sociology/Human Services Track majors can only have two SOC courses that count for their major and the CAAST minor.

(3) Sociology/General Track majors who wish to get a CAAST minor must take SOC 391 and SOC 392 as part of their free electives.

(4) Credits counted in Liberal Studies, not in the minor.

Child Development and Family Relations Minor

IUP students who major or minor in CDFR must earn a "C" grade or better in CDFR 218 and CDFR 224 and maintain a 2.0 GPA in major courses to graduate from the CDFR program.

The CDFR minor, consisting of 18 credits, is for students who desire to work in programs that entail all aspects of child development and family relationships and administration in human service agencies at federal, state, and local levels but who have their major course work in a related field. The CDFR minor is appropriate for all majors who wish to pursue careers working with children and families. The minor includes two required courses and any combination of four additional courses, including at least one 400-level course, with a CDFR prefix from the list provided.

Required Courses:

CDFR 218 - Child Development **Credits:** 3

CDFR 224 - Marriage and Family Relations **Credits:** 3

Four Courses from the Following

Four courses from the following (at least one must be at the 400 level), meeting prerequisites:

CDFR 310 - Child Observation and Assessment **Credits:** 3

CDFR 315 - Introduction to Early Intervention **Credits:** 3

CDFR 321 - Preschool Education: Play and Developmentally Appropriate Practices **Credits:** 3

CDFR 322 - Early Care and Education **Credits:** 3

CDFR 323 - Family Issues **Credits:** 3

CDFR 411 - Family and Community **Credits:** 3

CDFR 425 - Adolescence: Risk and Resiliency **Credits:** 3

CDFR 426 - Techniques of Parent Education **Credits:** 3

CDFR 427 - Administration of Human Service Programs **Credits:** 3

Total Minor Requirements: 18

Communications Media Minor

Required Courses:

COMM 101 - Introduction to Communications, Media, and Culture **Credits: 3**
COMM XXX - Electives in Communication Media **Credits: 15**

Total Minor Requirements: 18

Community Health Minor

The Community Health minor will help prepare students who desire to work in programs that communicate and advocate for health and health education services. This minor would be of interest to sociology, child development and family relations, food and nutrition, and allied health majors who are interested in working with targeted populations on making healthy behavior changes through planned instruction and outreach.

Required Courses: 6

KHSS 325 - School and Community Health **Credits: 3**
KHSS 417 - Contemporary Issues in School and Community Health **Credits: 3**
KHSS 420 - Health Education and Promotion at the Workplace **Credits: 3**

Controlled Electives: 12

(1)

Three courses from the following:

FDNT 212 - Nutrition **Credits: 3**
FDNT 402 - Community Nutrition **Credits: 3**
HOSP 343 - Fund-Raising for Special Events **Credits: 3**
KHSS 341 - Evaluations and Analytics in Kinesiology **Credits: 3**
KHSS 350 - Health Aspects of Aging **Credits: 3**
KHSS 450 - Curriculum and Programming in Sexuality Education **Credits: 3**
SOC 231 - Contemporary Social Problems **Credits: 3**
SOC 333 - Delinquency and Youth **Credits: 3**
SOC 336 - Sociology of the Family **Credits: 3**

Total Minor Requirements: 18

(1) Only two courses with the same prefix may be used as electives.

Computer Science Minor

Required Courses:

COSC 110 - Problem Solving and Structured Programming **Credits: 3**
COSC 210 - Object-Oriented and GUI Programming **Credits: 3**

Controlled Electives: 12

(1, 2, 3)

Select additional 12 credits in computer science including at least six credits from 300-level or higher courses. COSC 143 cannot be counted as part of a computer science minor.

Total Minor Requirements: 18

(1) COSC 101 is an appropriate entry course for this minor. However, COSC 101 cannot be counted as part of a Computer Science minor by management information systems majors.

(2) No more than six credits of overlap can be used for computer science and cyber security minors.

(3) See Computer Science minor advisor for suggestions.

Criminology Minor

(1)

Required Courses:

CRIM 101 - Crime and Justice Systems **Credits:** 3 (2)

CRIM 102 - Survey of Criminology **Credits:** 3

CRIM 401 - Contemporary Issues in Criminology **Credits:** 3

CRIM 403 - Dilemmas in Criminology and Criminal Justice **Credits:** 3

Two additional CRIM electives, one chosen from Controlled **Credits:** 6

Electives Group B and one from Group C (3, 4)

Total Minor Requirements: 18

(1) Must have formal Department of Criminology and Criminal Justice approval to be admitted to Criminology minor.

(2) Meets Liberal Studies Social Science requirement.

(3) For students in the Computer Science/Cyber Security program, CRIM 321 may be substituted for Group B elective.

(4) For students in the Computer Science/Cyber Security program, CRIM 323 may be substituted for Group C elective.

Cyber Security Minor

(1)

Required Courses:

COSC 108 - Introduction to Programming via Alice **Credits:** 3 (2)

or

COSC 110 - Problem Solving and Structured Programming **Credits:** 3

COSC 345 - Computer Networks **Credits:** 3 (3)

or

IFMG 352 - LAN Design and Installation **Credits:** 3 (3)

CRIM 101 - Crime and Justice Systems **Credits:** 3 (4)

or

CRIM 102 - Survey of Criminology **Credits:** 3 (4)

CRIM 321 - Cybersecurity and Loss Prevention **Credits:** 3

CRIM 323 - Cybersecurity and the Law **Credits:** 3

Total Minor Requirements: 18

- (1) Computer Science/Cyber Security students are not eligible to take this minor; instead, they must take a Criminology minor.
- (2) Computer science majors cannot count COSC 108 or COSC 110; instead, they must take one additional course from the following: CRIM 344, CRIM 354, CRIM 401.
- (3) Computer science majors cannot count COSC 352 /IFMG 352. Computer science majors must take COSC 345.
- (4) Criminology majors cannot count CRIM 101 or CRIM 102; instead, they must take one additional course from the following: COSC 341, COSC 356, COSC 362, COSC 427, COSC 429, COSC 432, COSC 454, COSC 482, IFMG 382. Students must select COSC 356 to receive NSTISSE 4011 Certification.

Cyber Security Minor

(1)

Required Courses:

COSC 110 - Problem Solving and Structured Programming **Credits: 3** (2)

or

Controlled Elective (see below)

COSC 216 - Introduction to Cyber Security **Credits: 3** (3)

COSC 345 - Computer Networks **Credits: 3** (4)

or

IFMG 352 - LAN Design and Installation **Credits: 3**

CRIM 101 - Crime and Justice Systems **Credits: 3** (5)

or

CRIM 102 - Survey of Criminology **Credits: 3** (5)

or

Controlled Elective (see below)

CRIM 321 - Cybersecurity and Loss Prevention **Credits: 3**

or

CRIM 323 - Cybersecurity and the Law **Credits: 3**

Controlled Electives:

Select at least 3cr from the following:

COSC 341 - Introduction to Database Management Systems **Credits: 3**

COSC 356 - Network Security **Credits: 3**

COSC 362 - Unix Systems **Credits: 3**

COSC 427 - Introduction to Cryptography **Credits: 3**

COSC 429 - Digital Forensics **Credits: 3**

COSC 430 - Introduction to Systems Programming **Credits: 3**

COSC 432 - Introduction to Operating Systems **Credits: 3**

COSC 454 - Information Assurance Administration **Credits: 3**

CRIM 321 - Cybersecurity and Loss Prevention **Credits: 3**

CRIM 323 - Cybersecurity and the Law **Credits: 3**

CRIM 401 - Contemporary Issues in Criminology **Credits: 3**

CRIM 403 - Dilemmas in Criminology and Criminal Justice **Credits: 3**

Total Minor Requirements: 18

- (1) At most 6cr of a student's major can be counted towards both the major and minor. Computer Science/Cyber Security students are not eligible to take this minor; instead, they must take a Criminology minor.
- (2) Students with COSC 110 (or equivalent such as IFMG 210) as part of their major must take 3 credits from the controlled elective list.
- (3) Computer science majors cannot count COSC 216 for both their major and minor.
- (4) Computer Science majors cannot count COSC 352 or IFMG 352. Computer Science majors must take COSC 345.
- (5) Students with CRIM 101 or CRIM 102 as part of their major must take 3 credits from the controlled elective list.

Dance Minor

The Dance minor provides a foundation for those interested in teaching dance, working in administration with a dance company, managing a private dance studio, working with theatre productions, or desiring a broad-based education within the dance discipline.

The minor is an 18-credit program with 6 required and 12 advised elective credits. The required credits include pertinent foundation courses and advanced-level theory courses. The required courses also provide a comprehensive study of production elements, fundamental and historical theories of dance, and dance choreographic and teaching theories that cannot be obtained in any of the elective courses. The advised elective credits include the technique courses.

The Dance minor is based on the National Standards for Arts Education dance requirements. Using this basis for the program ensures fundamental preparation for a number of students' needs, e.g., the dance teacher, the performer, and the dance studio owner.

Through advisement, the minor program can serve the individual student's needs. The program would be of interest to majors in secondary and elementary education, small business, recreation and physical education, theatre, music, and interdisciplinary fine arts and anyone who has an interest in dance and wants to broaden his or her liberal arts education.

Required Courses: 6

DANC 102 - Introduction to Dance **Credits: 3**

One Course from the Following:

DANC 351 - Choreography **Credits: 3**

DANC 353 - Dance Curriculum and Instruction **Credits: 3**

DANC 355 - Dance Production: Administration to Creation **Credits: 3**

Four Courses from the Following as Advised: 12

DANC 150 - Fundamentals of Dance **Credits: 3**

DANC 250 - Beginning Modern Dance **Credits: 3**

DANC 260 - Beginning Jazz Dance **Credits: 3**

DANC 270 - Beginning Ballroom and Tap Dance **Credits: 3**

DANC 280 - Beginning Ballet **Credits: 3**

DANC 290 - Ethnic Dance **Credits: 3**

DANC 485 - Dance Studio **Credits: 3**

Total Minor Requirements: 18

Deaf Studies Minor

A minor in Deaf Studies introduces the participant to essential information regarding hearing loss and deaf culture. In addition, basic sign language skills are developed. This course of study enables individuals to have a better understanding of the needs of persons who are deaf and hard-of-hearing and to communicate with individuals within the deaf community at a basic level.

The minor is an 18-credit program with 15 required and 3 elective credits. Required credits include the core courses that are essential to understanding the language and culture of the deaf community. The elective credits allow the minor candidate to select a more focused area of concentration.

Students must maintain a cumulative GPA of not less than 2.5 to enter and complete the minor. Except for the introductory courses, EDHL 114 and EDHL 115, only students who have officially declared a deaf studies minor will be able to schedule the designated courses. The grade received in American Sign Language courses must be a "C" or better to complete the minor.

This minor would be of interest to anthropology, criminology, education, nursing, psychology, disability services, and sociology majors and anyone else who is interested in interacting with persons who are deaf or hard-of hearing.

Required Courses: 15

EDHL 114 - Introduction to Deaf and Hard-of-Hearing Persons **Credits: 3**

EDHL 115 - Introduction to American Sign Language **Credits: 3**

EDHL 215 - Intermediate American Sign Language **Credits: 3**

EDHL 308 - Supporting Language and Communication for Deaf/Hard-of-Hearing, English Language Learners, and Individuals with Language Disorders **Credits: 3**

EDHL 317 - Sign Language in Educational Settings **Credits: 3**

Controlled Electives: 3

3 credits from the following:

EDEX 111 - Introduction to Exceptional Persons **Credits: 3**

EDHL 417 - Advanced American Sign Language **Credits: 3**

SPLP 222 - Introduction to Audiology **Credits: 3**

Total Minor Requirements: 18

Economics Minor

Required Courses:

ECON 121 - Principles of Macroeconomics **Credits: 3**

ECON 122 - Principles of Microeconomics **Credits: 3**

Controlled Electives: 12

Four courses from ECON 200 or higher with at least 6cr 300-level or higher (1, 2)

Total Minor Requirements: 18

(1) MATH 214, MATH 216, MATH 217, or another quantitative class approved by the chairperson may be substituted for ECON 355. If one of the previously noted MATH classes is substituted for ECON 355, it will not count as a 300-level or higher course.

(2) Neither ECON 101 nor ECON 143 counts as an ECON controlled elective.

Educational Psychology Minor

Undergraduate students may minor in educational psychology by applying application to the advisor of the minor program. Eighteen credits are required for the minor, take six of the following:

Required Courses

- EDSP 102 - Educational Psychology **Credits: 3**
- EDSP 373 - Psychology of Adolescent Education **Credits: 3**
- EDSP 378 - Learning **Credits: 3**
- EDSP 468 - Current Topics in Educational Psychology **Credits: 3**
- EDSP 476 - Foundations of Behavior Analysis **Credits: 3**
- EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**
- EDSP 479 - Interpreting and Critiquing Educational Research **Credits: 3**

Total Minor Requirements: 18

Educational Technology Minor

The department of Professional Studies in Education offers a minor in Educational Technology. The Educational Technology minor is an 18-credit program designed for students who are completing a teaching degree in any discipline.

NOTE: No more than two classes in a student's core program can be utilized towards credits in a minor.

Required Courses:

- ACE 103 - Digital Instructional Technology **Credits: 3**
- BTED 412 - Methods in Business and Information Technology II **Credits: 3**
- ETIT 330 - Technology in the Classroom **Credits: 3**
- MIDL 321 - 21st-Century Literacies for Diverse Learners **Credits: 3**

Total Minor Requirements: 18

Electives:

Two classes from:

- COMM 101 - Introduction to Communications, Media, and Culture **Credits: 3**
- COMM 240 - Communications Graphics **Credits: 3**
- COMM 249 - Basic Audio Recording Techniques **Credits: 3**
- COMM 271 - Beginning Photography **Credits: 3**
- COSC 110 - Problem Solving and Structured Programming **Credits: 3**
- COSC 210 - Object-Oriented and GUI Programming **Credits: 3**

Elementary and Middle-Level Mathematics Minor

The minor consists of 18 credits in Elementary and Middle-Level Mathematics Education. The minor may offer additional preparation for the teaching of elementary and middle mathematics. This minor does not lead to certification and is not open to students majoring in middle-level education 4-8/mathematics.

Required Courses: 12

- MATH 151 - Elements of Mathematics I **Credits: 3**

MATH 152 - Elements of Mathematics II **Credits:** 3
MATH 456 - Geometry for Mathematics Instruction **Credits:** 3
MATH 471 - Algebra for Mathematics Instruction **Credits:** 3

Controlled Electives: 6

(1)

Select 6cr from the following:

MATH 153 - Elements of Algebra **Credits:** 3
MATH 317 - Probability and Statistics for Mathematics Instruction **Credits:** 3
MATH 420 - Patterns and Functions for Elementary/Middle-Level Teachers **Credits:** 3
MATH 457 - Number Theory for Mathematics Instruction **Credits:** 3
MATH 458 - Logic and Logical Games for Elementary/Middle-Level Teachers **Credits:** 3
MATH 459 - Technology in Elementary/Middle-Level Mathematics Instruction **Credits:** 3
MATH 461 - Discrete Mathematics for Mathematics Instruction **Credits:** 3

Total Minor Requirements: 18

(1) Other MATH content courses with the approval of the minor advisor.

English Minor

To minor in English, 18 credits in English courses are required beyond the Liberal Studies requirement of ENGL 101 and ENGL 202. At least 6 of these credits must be numbered 300 level or higher. ENGL 121 may be used to fulfill part of the 18 credits required. Of these 18 credits, no more than 6 credits may be transferred to IUP from another university.

Environmental Microbiology Minor

Minor track intended for students interested in the field of environmental microbiology. The minor courses will introduce students to the diversity of microbial populations and their roles in environmental process, and overall health of this planet.

Required Courses:

(1)

BIOL 105 - Cell Biology **Credits:** 3
BIOL 201 - Principles of Ecology and Evolution **Credits:** 4
BIOL 205 - Ecological Methods **Credits:** 3
BIOL 241 - Introductory Medical Microbiology **Credits:** 4
BIOL 364 - Immunology **Credits:** 3
BIOL 478 - Mycology and Plant Pathology **Credits:** 3

Total Minor Requirements: 20

(1) No more than two of majors courses can apply (excluding prerequisite, liberal studies, cognate or college core courses) towards Minor.

Exercise Science Minor

The minor in Exercise Science provides students who have an interest in fitness with knowledge to educate and skills to lead exercise for individuals who wish to achieve their personal fitness goals. At the completion of the minor, students will have the knowledge and skills to perform basic fitness

assessments and provide individual/small group exercise training. Students will possess the knowledge, skills and abilities to take a variety of national certification examinations at the personal trainer level.

Required Courses: 12

KHSS 221 - Human Structure and Function **Credits: 3**
(3)
KHSS 285 - Group/Individual Exercise Leadership **Credits: 3**
KHSS 286 - Personal Training Practicum **Credits: 3**
KHSS 343 - Physiology of Exercise **Credits: 3**

Controlled Electives: 6

Two courses from the following:

KHSS 375 - Physiological Basis of Strength Training and Conditioning **Credits: 3**
KHSS 411 - Physical Fitness Appraisal **Credits: 3**
KHSS 413 - Wellness Coaching for Lifestyle Behavior Management **Credits: 3**
KHSS 415 - Lifestyle Behavior Management for Physical Activity **Credits: 3**

Total Minor Requirements: 18

(1) Completion of the Exercise Science minor does not guarantee entry into the Exercise Science major. Students desiring transfer into the INDIANA UNIVERSITY OF PENNSYLVANIA UNDERGRADUATE CATALOG, 2019-20 Page 111 Exercise Science major must have a minimum 2.5 overall GPA.

(2) Students must attain a grade "C" or better in each of the courses.

(3) Students must take KHSS 221 before any other class in the minor. BIOL 150 may be substituted.

Family and Consumer Science Minor

Required Courses: 18

CDFR 218 - Child Development **Credits: 3**
CDFR 224 - Marriage and Family Relations **Credits: 3**
FCSE 315 - Consumer Economics and Family Finance **Credits: 3**
FSMR 112 - Fundamentals of Clothing Construction **Credits: 3**
or
FSMR 180 - Introduction to Fashion **Credits: 3**
INDS 105 - Introduction to Interior Design **Credits: 3**

Controlled Elective: 3

Any 300 or 400 level course in CDFR, INDS, FCSE, FDNT, or FSMR (1)

Total Minor Requirements: 18

(1) Prerequisites and/or instructor permission may be required.

Finance Minor

(1,2)

(for business majors in the ECOBIT only)

Required Courses: 9

FIN 310 - Fundamentals of Finance **Credits: 3**

FIN 320 - Corporate Finance **Credits: 3**

FIN 324 - Principles of Investments **Credits: 3**

Controlled Electives: 9

Three courses from FIN or REAL at 300 level or higher

Total Minor Requirements: 18

(1) Minor course requirements must be completed with a minimum cumulative GPA of 2.0.

(2) Maximum of two REAL courses.

Forensic Biosciences Minor

(1)

The goal of this interdisciplinary minor is to provide students with a broad-based understanding of the field of forensic biosciences. The minor allows students to gain both a deep understanding of a traditional discipline through their major field of study while gaining experience with various aspects of forensic biology and criminal investigations. It is not designed to provide students necessarily with the methods and measures of forensics, which will come from student's undergraduate fields of study and/or future graduate study. The purpose is to give students an understanding of the basic issues and the applications of those methods within the context of forensic biology.

Foundation Courses: 12

(all majors)

- BIOL 107 - Introduction to Forensic Biology **Credits: 3**
- BIOL 211 - Investigative Biological Forensics **Credits: 3**
- BIOL 313 - Forensic Analysis of DNA **Credits: 3**
- CHEM 105 - The Forensic Chemistry of CSI **Credits: 3**

Required Course: 4

- BIOL 411 - Forensic Biology Laboratory Operations **Credits: 4**

Controlled Elective: 3-4

One course from the following:

- ANTH 488 - Geophysical Applications in Archaeology **Credits: 3**
- ANTH 491 - Zooarchaeology **Credits: 3**
- BIOL 103 - Life on Earth **Credits: 4**
- BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**
- BIOL 105 - Cell Biology **Credits: 3**
- BIOL 106 - Human Genetics and Health **Credits: 3**
- BIOL 115 - Biotic Diversity of North America **Credits: 3**
- BIOL 323 - Introduction to Toxicology and Risk Assessment **Credits: 3**

- BIOL 364 - Immunology **Credits:** 3
- BIOL 493 - Biology Internship **Credits:** 3-12
- PSYC 388 - Forensic Psychology **Credits:** 3

Total Minor Requirements: 19-20

(1) Must have formal Biology Department approval to be admitted to the minor in Forensic Biosciences.

French Minor

Placement

Students with no previous French study will be placed in FRNC 101, a class reserved for true beginners. Students with previous French study in high school or college will be placed into the appropriate course by means of the online WebCAPE placement test. This test may be taken more than once before enrolling in French courses; it is free of charge for IUP students. Instructions on how to take the online WebCAPE test are available on the departmental website and in print in the Department of Foreign Languages office (Sutton Hall). As deemed necessary by the individual student or French faculty, the proposed WebCAPE placement may be further refined: Students' writing and speaking proficiency may be additionally assessed by one or more faculty members in the French program in the Department of Foreign Languages. Each student's individual requirements and the judgment of the classroom instructors will also be considered in placement. No student will be allowed to register for or take a D/F repeat in FRNC 101, FRNC 102, or FRNC 201 when credit has already been received for a higher numbered course.

IUP Course Credit for Acquired Proficiency

Incoming students may receive course credit for their oral proficiency levels in French through the American Council on Education (ACE) Credit Recommendation Service and Language Testing International (LTI), the assessment agency for the American Council on the Teaching of Foreign Languages (ACTFL). Students who have taken an ACTFL Oral Proficiency Interview (OPI) through LTI, received a proficiency rating by LTI, and received credit recommendation by ACE may receive the following course credits in French at IUP:

ACTFL Oral Proficiency Ratings (rated by LTI)	ACE Credit Recommendations	IUP French Course Equivalencies
Intermediate-Mid	4 Lower Division credits	Either FRNC 102 or FRNC 201 depending on placement on departmental written exam
Intermediate-High/Advanced Low	8 Lower Division credits	FRNC 201 and FRNC 220
Advanced-Mid or higher	10 Lower Division credits	FRNC 201, FRNC 220 and approved conversation elective

To begin the process, students must contact LTI by e-mail (testing@language-testing.com) to request an ACE College Credit Recommendation by OPI Examination information package and application. There is a fee for the OPI and an ACE application fee to be paid by the candidate.

Study Abroad French Studies Summer Programs: Aix-en-Provence, France/Intensive French Language (Aix-Marseille University) and the Cours d'été, Nancy, France

The Department of Foreign Languages has partnered with the Office of International Education to establish two study abroad experiences in Aix-en-Provence and in Nancy, France. All students having successfully completed FRNC 102 are invited to consider continuing their study of French in France. Students seeking the certificate or minor in French are strongly encouraged to study abroad in one of our centers in France.

These summer programs propose a five or six-week session, including up to 25 hours of weekly language instruction as well as cultural field trips or activities, and weekly debriefing sessions with faculty from the IUP Department of Foreign Languages. Housing options include accommodations in university housing, apartments, and homestay with a host family. Both programs offer 6 hours of transfer credits that may be used toward completion of any foreign language requirement, the certificate in French, or the French minor.

For further information about cost and application procedures, contact the Department of Foreign Languages.

Required Courses:

(1)

- FRNC 201 - Intermediate French **Credits: 4** (2)
- FRNC 220 - Intermediate French Conversation **Credits: 3**
- FRNC 230 - Intermediate French Composition and Grammar **Credits: 3**
- One IUP French elective course **Credits: 3**
- Two or three courses at IUP or an accredited institution in the US or abroad; transfer or ACE credit; individualized instruction or independent study courses (3, 4) **Credits: 6-9**

Total Minor Requirements: 18-19

(1) At least nine of the 18 or 10 of the 19 credits must be taken at IUP. No more than 9cr transfer or study abroad credits will be counted toward the French minor; any additional transfer or study abroad credits will count as free electives.

(2) If a student is exempted from FRNC 201 based on his/her score on the French placement test, the student must instead take a 200-or 300- level course in place of FRNC 201.

(3) At least 6cr of the minor must be upper-division courses, generally those numbered 300 and above or otherwise designated as upper-division.

(4) All courses taken outside of IUP must be approved by the French minor advisor. Various study abroad opportunities in France and French-speaking countries are available to students through departmental programs and offerings provided by the Office of International Education (OIE).

General Sociology, Sociology Minor

Required Courses:

- SOC 151 - Principles of Sociology **Credits: 3**
or
- SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**
- SOC 320 - Sociological Theory **Credits: 3**

Controlled Electives:

One Course from the Following:

- SOC 361 - Social Stratification **Credits: 3**
- SOC 362 - Racial and Ethnic Minorities **Credits: 3**
- SOC 363 - Sociology of Gender **Credits: 3**

Additional Courses: 9

Three additional courses in SOC/SOWK, at least one of which must be 300 level or above

Total Minor Requirements: 18

Geography Minor

A minor in geography is appropriate for majors in all other fields of the natural and social sciences. Students in marketing and information systems will find a minor in this field relevant. A minor consists of 18 credits in courses taken only with the GEOG prefix; at least two courses must be at the 200 level and at least two courses must be at the 300 level or above. The department suggests students take major core courses if graduate study is anticipated.

Controlled Electives:

(1)

- At least two courses at the 200 level
- At least two courses at the 300 level or above

Total Minor Requirements: 18

(1) Only courses taken as GEOG may be counted toward the minor.

Geology Minor

The minor in geology is designed for students who want a background in geology in conjunction with their main area of study. This minor may be particularly appropriate for students pursuing degrees in business or one of the social or physical sciences.

Required Introductory Course: 4

- GEOS 201 - Foundations of Geology **Credits: 4**

Controlled Elective Courses: 14

(1) (2) Any GEOS course 200-level or above, except GEOS 470, GEOS 475, and GEOS 480.

Total Minor Requirements: 18

(1) At least 6cr must be 300-level or higher.

(2) Only one Geoscience Field Workshop (including prerequisite Seminar) can be counted toward the minor.

German Minor

Study Abroad

The department encourages all students who study German at IUP to consider study abroad for one or two semesters. To provide this opportunity at a relatively modest cost, the university has arranged an exchange of students between Duisburg University and IUP. By participating in this or other approved programs, students can earn from 12 to 14 credits per semester. For information, contact the Department of Foreign Languages.

IUP Course Credit for Acquired Proficiency

Incoming students may receive course credit for their oral proficiency levels in German through the American Council on Education (ACE) Credit Recommendation Service and Language Testing International (LTI), the assessment agency for the American Council on the Teaching of Foreign Languages (ACTFL). Students who have taken an ACTFL Oral Proficiency Interview (OPI) through LTI, received a proficiency rating by LTI, and received credit recommendation by ACE may receive the following course credits in German at IUP:

ACTFL Oral Proficiency Ratings (LTI)	ACE Credit Recommendations	IUP German Course Equivalencies
Intermediate-Mid	4 Lower Division credits	Either GRMN 102 or GRMN 201 depending on placement on departmental written exam
Intermediate-High/Advanced Low	8 Lower Division credits	GRMN 201 and GRMN 220
Advanced-Mid or higher	10 Lower Division credits	GRMN 201, GRMN 220 and approved conversation elective

To begin the process, students must contact the Foreign Languages Department.

Required Courses:

(1)

- GRMN 201 - Intermediate German **Credits: 4**

(2)

- GRMN 220 - Intermediate German Conversation **Credits: 3**
- GRMN 230 - Intermediate German Composition and Grammar **Credits: 3**
- One IUP German elective course **Credits: 3**
- Two or three courses at IUP or an accredited institution in the US or abroad; transfer credit; individualized instruction or independent study courses (3, 4) **Credits: 6-9**

Total Minor Requirements: 18-19

(1) At least nine of the 18 or 10 of the 19 credits must be taken at IUP. No more than 9cr transfer or study abroad credits will be counted toward the German minor; any additional transfer or study abroad credits will count as free electives.

(2) If a student is exempted from GRMN 201 based on his/her score on the German placement test, the student must instead take a 200-or 300- level course in place of GRMN 201.

(3) At least 6cr of the minor must be upper-division courses, generally those numbered 300 and above or otherwise designated as upper-division.

(4) All courses taken outside of IUP must be approved by the German minor advisor. Various study abroad opportunities in Germany are available to students through departmental programs and offerings provided by the Office of International Education (OIE).

Global Health Minor

(2, 5)

Global health is an area for study, research, and practice that places a priority on improving health and achieving health equity for all people worldwide. The Global Health minor will equip students interested in health and medicine with the analytical and critical-thinking skills needed to understand, explain, and critique health inequalities. They will recognize how these health disparities result from globalization and the need for promoting health equity in areas of the world with under-resourced and constrained health care. The minor is organized around six global health pathways:

- food, nutrition, and hunger
- environmental justice
- law, ethics, and policy
- disaster, conflict, and displacement
- gender, sexuality, and reproductive health
- aging

Students will select one of the six pathways and will complete 12 credits in the selected pathway, in addition to Introduction to Global Health and either Medical Anthropology or Medical Sociology.

Health topics, theories, and research methods as addressed in the social sciences will advance students' interdisciplinary understandings of health disparities, with a corresponding awareness of health equity. Practicums, through field school participation, internships, and other experiential learning opportunities, will merge course material with real world praxis, and will provide students with greater insights into global health and its contributions. The Global Health minor will prepare students for graduate studies in health-related fields and careers in health-promoting governmental agencies and non-governmental organizations (NGOs). Ethnographic field school, independent study courses, and internship courses may be applied to each global health pathway with the approval of the Global Health minor committee. Students should consult with the program coordinator to determine if there are any prerequisites for the courses listed below. The program coordinator will work with individual departments to determine if students may qualify for prerequisite exemptions. Course substitutions will be permitted with the approval of the Global Health minor committee.

Core Courses: 6

- ANTH 240 - Introduction to Global Health **Credits: 3**
- ANTH 444 - Medical Anthropology **Credits: 3**
- or
- SOC 442 - Medical Sociology **Credits: 3**

Select one Global Health Pathway: 12

Food, Nutrition, and Hunger

(7 courses, choose 4) (3, 4)

At least one course must have a FDNT prefix.

The courses in this pathway offer the students an interdisciplinary perspective that will provide students with the analytical tools to examine world needs associated with food, nutrition, and health.

- ANTH 430 - Anthropology of Food **Credits: 3**
- ECON 360 - Health Economics **Credits: 3**
- ECON 362 - Global Poverty and Health **Credits: 3**
- FDNT 143 - Current Issues in Nutrition and Wellness **Credits: 3 (1)**
- or
- NURS 143 - Healthy People—Promoting Wellness **Credits: 3 (1)**
- FDNT 415 - Sustainable Nutrition **Credits: 3**
- FDNT 470 - Human Food Consumption Patterns **Credits: 3**
- SOC 337 - Society, Globalization, and Risk **Credits: 3**

Environmental Justice

(7 courses, choose 4) (3, 4)

The courses in this pathway offer the students an interdisciplinary perspective that will provide students with the analytical tools to examine the linkages between environmental issues in the world and health.

- ANTH 420 - Environmental Anthropology **Credits: 3**

- BIOL 221 - Environmental Health and Protection **Credits: 4**
- ECON 362 - Global Poverty and Health **Credits: 3**
- FDNT 415 - Sustainable Nutrition **Credits: 3**
- GEOG 343 - Fresh Water Resources **Credits: 3**
- or
- RGPL 343 - Fresh Water Resources **Credits: 3**
- PHIL 270 - Ethics and the Environment **Credits: 3**
- SOC 417 - Global Service Learning **Credits: 3**

Law, Ethics, and Policy

(9 courses, choose 4) (3, 4)

The courses in this pathway will allow students to learn about using law and ethics to develop and advocate for legislation and policies designed to address social injustice and improve health in the world.

- ANTH 352 - The Anthropology of Human Rights **Credits: 3**
- ANTH 457 - Applied Anthropology **Credits: 3**
- ECON 360 - Health Economics **Credits: 3**
- ECON 362 - Global Poverty and Health **Credits: 3**
- NURS 314 - Health Policy and Law **Credits: 3**
- or
- ELR 314 - Health Policy and Law **Credits: 3**
- PHIL 130 - Introduction to Biomedical Ethics **Credits: 3**
- PLSC 405 - Sexuality and Law **Credits: 3**
- SOC 362 - Racial and Ethnic Minorities **Credits: 3**
- SOC 452 - Disability and Society **Credits: 3**

Disasters, Conflicts, and Displacement

(6 courses, choose 4) (3, 4)

The courses in this pathway will offer the students an interdisciplinary perspective to examine natural disasters and armed conflicts that result in displacement and poor health in many parts of the globe.

- ANTH 352 - The Anthropology of Human Rights **Credits: 3**
- ANTH 370 - Latinos and Diasporas **Credits: 3**
- PSYC 378 - Psychology of Death and Dying **Credits: 3**
- RGPL 103 - Global Cities: Planning and Development **Credits: 3**
- SOC 337 - Society, Globalization, and Risk **Credits: 3**

Gender, Sexuality, and Reproductive Health

(10 courses, choose 4) (3, 4)

The courses in this pathway will offer the students an interdisciplinary perspective that will provide students with the analytical tools to examine gender, sexuality, and related health issues as well as reproductive health knowledge and services in the world.

- ANTH 350 - Anthropology of Gender **Credits: 3**
- BIOL 117 - Understanding HIV Biology and AIDS **Credits: 3**
- KHSS 143 - Wellness **Credits: 3** (1)
- ENGL 336 - Language, Gender, and Society **Credits: 3**
- LGBT 200 - Introduction to Lesbian, Gay, Bisexual, Transgender, and Queer Studies **Credits: 3**
- PLSC 405 - Sexuality and Law **Credits: 3**
- PSYC 379 - Psychology of Human Sexuality **Credits: 3**

- SOC 251 - Sociology of Human Sexuality **Credits: 3**
- SOC 363 - Sociology of Gender **Credits: 3**
- SOC 410 - Men and Masculinities **Credits: 3**

Aging

(8 courses, choose 4) (3, 4)

The courses in this pathway will offer the students an interdisciplinary perspective that will provide students with the analytical tools to examine fundamentals of global aging and health.

- ECON 362 - Global Poverty and Health **Credits: 3**
- FDNT 410 - Food, Nutrition, and Aging **Credits: 3**
- KHSS 350 - Health Aspects of Aging **Credits: 3**
- PSYC 312 - Adult Development and Aging **Credits: 3**
- PSYC 378 - Psychology of Death and Dying **Credits: 3**
- SOC 357 - Sociology of Aging and the Life-course **Credits: 3**
- SOC 452 - Disability and Society **Credits: 3**

Total Minor Requirements: 18

- (1) Only one 143 Liberal Studies class may be taken in a student's entire program.
- (2) At least six credits in the selected pathway must be at the 300 level or above.
- (3) Only one 100-level course may count in the selected pathway.
- (4) Only two courses in the selected pathway may come from the student's major.
- (5) With the exception of GLOB courses, no course prefix may be used more than twice without written permission from the program director.

History Minor

To minor in history, 18 credits of courses with an HIST prefix are required, with at least 6 credits taken at the 300 or higher level and no more than 3 credits taken at the 100 level. No more than 9 transfer credits may be counted toward the minor.

Homeland Security Minor

Required Courses:

- PLSC 101 - World Politics **Credits: 3 (1)**
- PLSC 111 - American Government **Credits: 3 (1)**
- PLSC 283 - American Foreign Policy **Credits: 3**
- PLSC 344 - Terrorism **Credits: 3**
- or
- CRIM 344 - Terrorism **Credits: 3**
- PLSC 388 - Dimensions of National Security **Credits: 3**
- PLSC 465 - Intelligence Process and Policy **Credits: 3**

Total Minor Requirements: 18

- (1) Must be completed before taking additional courses in the minor.

Hospitality Management Minor

A minor in Hospitality Management prepares students with fundamental knowledge in the management of hospitality operations. Hospitality industry specific management skills in the areas of employee development, purchasing, managing and critiquing food production systems pertinent to the hospitality industry are the focus of this minor.

Required Courses:

- HOSP 130 - Food Service Sanitation **Credits: 1**
- HOSP 150 - Principles of Hospitality Management **Credits: 3**
- HOSP 256 - Human Resources in the Hospitality Industry **Credits: 3**
- HOSP 259 - Hospitality Purchasing **Credits: 3**
- HOSP 300 - Critiquing Commercial Restaurants **Credits: 1**
- HOSP 330 - Applications of Food Production and Service **Credits: 4**
- HOSP Elective **Credits: 3 (1)**

Total Minor Requirements: 18

(1) Needs to be 300-level or higher

Hotel and Lodging Management Minor

The Hotel and Lodging Minor prepares students with industry specific skills required of today's hotel professional. Students will learn how to lead front office operations, housekeeping and facilities management, industry standard pricing strategies, revenue management, the role of a hotel sales department, and how to lead with a focus on service management.

Required Courses: 12

- HOSP 260 - Hotel Operations Management **Credits: 3**
- HOSP 325 - Hotel Sales **Credits: 3**
- HOSP 372 - Housekeeping and Facilities Management **Credits: 3**
- HOSP 400 - Hotel Revenue Management **Credits: 3**

Controlled Electives: 6

- HOSP courses approved by department chair totaling at least 6cr

Total Minor Requirements: 18

Human Services, Sociology Minor

Required Course:

- SOC 151 - Principles of Sociology **Credits: 3**
or
- SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**
- SOC 391 - Foundations of Sociological Practice **Credits: 3**
- SOC 392 - Clinical Sociological Practice **Credits: 3**

Controlled Electives:

One Course from the Following:

- SOC 320 - Sociological Theory **Credits: 3**
- SOC 361 - Social Stratification **Credits: 3**

Additional Courses

Two additional courses in SOC/SOWK, at least one of which must be 300 level or above

Total Minor Requirements: 18

International Studies Minor

Required Courses:

- PLSC 101 - World Politics **Credits: 3**

Controlled Electives: 15

Five additional PLSC courses (15cr) from the following, at least two of which must be 300 level or higher:

- PLSC 280 - Comparative Government I: Western Political Systems **Credits: 3**
- PLSC 282 - International Relations **Credits: 3**
- PLSC 283 - American Foreign Policy **Credits: 3**
- PLSC 285 - Comparative Government II: Non-Western Political Systems **Credits: 3**
- PLSC 383 - Political Systems: Asia **Credits: 3**
- PLSC 384 - Political Systems: Middle East **Credits: 3**
- PLSC 387 - Political Systems: Latin America **Credits: 3**
- PLSC 388 - Dimensions of National Security **Credits: 3**
- PLSC 389 - International Development Strategies **Credits: 3**
- PLSC 422 - International Law and Organizations **Credits: 3**
- PLSC 465 - Intelligence Process and Policy **Credits: 3**

Total Minor Requirements: 18

Journalism and Public Relations Minor

(1)

Required Courses:

- JRNL 102 - Basic Journalistic Skills **Credits: 3 (1)**
- JRNL 105 - Journalism and the Mass Media **Credits: 3 (1)**
- JRNL 120 - Journalistic Techniques for Professional Writing **Credits: 3 (2)**

Controlled Electives:

- JRNL course of 300-level or higher **Credits: 3**
- JRNL course of 300-level or higher **Credits: 3**
- JRNL free elective **Credits: 3**

Total Minor Requirements: 18

- (1) A grade of "C" or better is required for graduation with a minor in journalism and public relations.
- (2) JRNL 102 is a prerequisite for JRNL 120.

Lesbian, Gay, Bisexual, Transgender, and Queer (LGBT&Q) Studies Minor

The Lesbian, Gay, Bisexual, Transgender, and Queer (LGBT&Q) Studies minor provides students the opportunity to critically analyze influences on and of sexualities, sexual and gender identity formation, and experiences in various social contexts, with a focus on sexual minorities and on preparing students to live and work in a pluralistic society. This interdisciplinary minor includes courses from a variety of disciplines, including sociology, anthropology, psychology, English, health education, child development and family relations. Students will examine diversity in sexual and gender identities, and the intersections of sexualities and gender with other identities including race, religion, and social class. Students also explore institutional influences, including family, politics, labor force and economics, religion, education, health care, media, arts, and sciences and the local, national, and global discourse on sexualities and gender identities. The curriculum additionally includes critical examination of the formation and effects of public policies on individuals and communities of differing sexual and gender identities, analysis of representations, and the discourses on sexualities as expressed through language, literature, and the arts, as well as the policies and practices of social institutions such as health care, religion, politics, education, and sports, among others.

Required Course: 3

- LGBT 200 - Introduction to Lesbian, Gay, Bisexual, Transgender, and Queer Studies **Credits: 3**

Controlled Electives: 15

Five courses from the following, two of which must be 300 level or higher: (1)

- ANTH 350 - Anthropology of Gender **Credits: 3**
- ANTH 352 - The Anthropology of Human Rights **Credits: 3**
- CDFR 224 - Marriage and Family Relations **Credits: 3**
- CDFR 323 - Family Issues **Credits: 3**
- ENGL 350 - Gender and Sexual Orientation in Literature, Theory, and Film **Credits: 3**
- KHSS 450 - Curriculum and Programming in Sexuality Education **Credits: 3**
- LGBT 400 - Queer Theory **Credits: 3**
- PLSC 405 - Sexuality and Law **Credits: 3**
- PSYC 379 - Psychology of Human Sexuality **Credits: 3**
- SOC 251 - Sociology of Human Sexuality **Credits: 3**

Total Minor Requirements: 18

- (1) Other relevant courses may serve as an elective with permission of the LGBT&Q Studies coordinator.

For further information on this minor, contact the College of Humanities and Social Sciences, 201 McElhane Hall, 724-357-2280.

Management Information Systems Minor

- (1)

The department welcomes minors for students who are majoring in other business programs. The Management Information Systems minor offers other business majors a technical enhancement to their area of interest, a necessity for today's business manager.

(for business majors in the ECOBIT only)

Required Courses:

- IFMG 210 - Introduction to Front-End Business Applications **Credits: 3**
- IFMG 230 - Introduction to Back-End Business Applications **Credits: 3**
- IFMG 300 - Information Systems: Theory and Practice **Credits: 3 (2)**
- IFMG 390 - Database Theory and Practice **Credits: 3**

Controlled Electives: 6

Six credits from any IFMG and/or QBUS courses except

- IFMG 101 - Computer Literacy **Credits: 3**
- IFMG 201
- QBUS 215 - Business Statistics **Credits: 3**

Total Minor Requirements: 18

(1) Minor course requirements must be completed with a minimum cumulative GPA of 2.0.

(2) IFMG 300 is both a core course and requirement for the minor.

Management Minor

(1)

(for business majors in the ECOBIT only)

Required Courses:

- MGMT 275 - Introduction to Entrepreneurship **Credits: 3**
- MGMT 300 - Human Resource Management **Credits: 3**
- MGMT 310 - Principles of Management **Credits: 3**
- MGMT 434 - Industrial Quality: Statistical Tools and Management **Credits: 3**
- MGMT 451 - International Management **Credits: 3**
- One MGMT 1XX, 2XX, 3XX, or 4XX course 3cr

Total Minor Requirements: 18

(1) Minor course requirements must be completed with a minimum cumulative GPA of 2.0.

Marketing Minor

(1)

(for business majors and students majoring in fashion merchandising, sport administration, art, journalism and public relations, or hospitality management)

Required Courses:

- MKTG 320 - Principles of Marketing **Credits: 3**
- MKTG 321 - Consumer Behavior **Credits: 3**
- Four additional MKTG courses **Credits: 12**

Total Minor Requirements: 18

(1) Minor course requirements must be completed with a minimum cumulative GPA of 2.0.

Mathematics Minor

The minor consists of a minimum of 18 credits in mathematics including at least 6 credits from 300-level or higher courses. The minor prepares students for advanced study in areas such as economics, computer science, physics, and other natural sciences. Anyone required to take a year of calculus should consider the Mathematics minor.

A cumulative GPA of at least 2.0 in MATH courses is required for the Mathematics or Applied Statistics minor. No more than 6 credits of overlap can be used for the Mathematics and Applied Statistics minors. Transfer students must take at least three courses from IUP with at least two courses from the IUP Mathematics Department in order to complete a minor.

Required Courses: 6-8

- MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**
or
- MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3**
- MATH 122 - Calculus II for Natural and Social Sciences **Credits: 4**
or
- MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3**

Controlled Electives: 10-12

(1, 2)

Select the additional 10-12 credits from MATH 343, MATH 309, or any required courses for mathematics majors. One of MATH 411 or MATH 412 is permitted but not both. Must include 6 credits from courses at the 300 level or higher

Total Minor Requirements: 18

(1) The following courses are excluded: MATH 100, MATH 101, MATH 105, MATH 110, MATH 115, MATH 214, MATH 217, MATH 417, MATH 418, MATH 480 and courses for the Middle-Level Education 4-8/Mathematics specialization.

(2) No more than 6cr of overlap with the minor in Applied Statistics is permitted.

Military Leadership Minor

The Military Leadership minor prepares ROTC cadets to execute the duties of a commissioned officer in the United States Army. Includes 12 credits of applied military science focusing on military teamwork, leadership, management, and physical preparedness and 6 credits of foundational material including interpersonal self-awareness and the social construction of differences that are the basis for shared organizational objectives. Advances life-long learning and leader development utilizing the US Army Chief of Staff's Professional Reading List. The minor is only available for students enrolled in the Reserve Officer Training Corps (ROTC) and has been designed to connect the principles of teamwork and military leadership, allowing students to take both the minor in Military Leadership and the minor in Effective Teamwork and Communication.

Required Courses: 6

Foundational:

- SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3 (1)**
- THTR 161 - Introduction to Theatre: Interpersonal Practices **Credits: 3 (2)**

Military Science: 12 (3)

- MLSC 305 - Fundamentals of Leadership and Modern Learning/Teaching Relationship **Credits: 3**
- MLSC 306 - Study of Advance Leader Planning and Execution of Modern Combat Operations **Credits: 3**
- MLSC 407 - Management of the Military Complex to Include Fundamentals of Military and International Law **Credits: 3**
- MLSC 408 - Seminar in Military Analysis and Management **Credits: 3**

Practical Applications in Military Leadership: 0

- Leadership Laboratory **Credits: 0 (4)**

Total Minor Requirements: 18

- (1) SOC 161 counts toward the Liberal Studies Social Science requirement. SOC 161 and SOC 151 are interchangeable for D/F repeat. SOC 161 is required for the Military Leadership minor.
- (2) THTR 161 counts toward the Liberal Studies Fine Arts requirement. THTR 161 and THTR 101 are interchangeable for D/F repeat. THTR 161 is required for the Military Leadership minor.
- (3) Students taking 300- and 400-level MLSC courses must be under contract with the Military Science Department to become a US Army officer.
- (4) The Leadership Laboratory, a 0cr course, provides the practical application of military leadership through scenario based tactics.

Music Minor

(1)

Required Courses: 15-18

- APMU XXX - Applied Music **Credits: 2 (2)**
- MUSC 115 - Theory I **Credits: 3**
- MUSC 111 - Theory Skills I **Credits: 2**
or
- MUSC 116 - Theory II **Credits: 3**

2-4 Semesters of the Following:

- MUSC 120-MUSC 140 (1cr each) 6cr of MUHI or MUSC 300-level or above **Credits: 6**

Electives: 0-3

- Courses with MUSC, MUHI or APMU (by permission only) prefix, **except** ensembles (MUSC 120-MUSC 140) and courses in the music education sequence (MUSC 155, MUSC 157, MUSC 159, MUSC 161, MUSC 219, MUSC 240, MUSC 331, MUSC 333, MUSC 335, MUSC 337)

Total Minor Requirements: 18

(1) Students must audition to be admitted into the minor.

(2) Admitted minors will receive one semester of 2cr applied lessons and may (when possible) receive further semesters depending on instructor availability. Students must be enrolled in an ensemble (as advised) during any semester in which they receive applied lessons.

Neurobiology Minor

Students who obtain a Neurobiology minor would be able to demonstrate knowledge of the neurobiological processes in animals and humans. This minor is an excellent option for students who are (i) planning to pursue advanced study in any of several fields related to neurobiology or neuroscience whether it be cognitive, behavioral, developmental, computational, molecular; or (ii) seeking relevant training for jobs related to the assessment, rehabilitation, and treatment of traumatic brain injury, brain diseases, and addiction. Additionally, this minor could also be attractive to psychology or other (Pre-) health majors.

Required Courses:

- BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**
or
- BIOL 240 - Human Physiology **Credits: 4**
- BIOL 477 - Neurobiology **Credits: 3**

Controlled Elective Courses: 12

(1)

- BIOL 409 - Pharmacology Principles and Applications **Credits: 3**
- BIOL 462 - Vertebrate Endocrinology **Credits: 3**
- BIOL 469 - Circadian Rhythms and Sleep **Credits: 3**
- BIOL 479 - Neurobiology of Addiction **Credits: 3**
- BIOL 481 - Special Topics **Credits: 1-3 (2)**
- PHIL 360 - Philosophy of Mind **Credits: 3**
- PHIL 390 - Philosophy of Human Nature **Credits: 3**
- PSYC 372 - Drugs and Behavior **Credits: 3**

Total Minor Requirements: 19

(1) At least 6cr should be from BIOL courses.

(2) Needs approval of department chair.

Nutrition Minor

This minor is recommended for students majoring in related disciplines, such as nursing and allied health, pre-medical, pre-pharmacy, hospitality management, kinesiology, health, and sport science, child development and family relations, and family and consumer sciences education, and for students who have a personal, consumer-oriented interest in nutrition. Science prerequisites for the minor are, at a minimum, CHEM 101/CHEM 102 or BIOL 104/BIOL 106.

Required Courses: 6

- FDNT 212 - Nutrition **Credits: 3**
- FDNT 213 - Life Cycle Nutrition **Credits: 3**

Controlled Electives: 12-13

Four additional courses from the following list. Other FDNT courses may be selected but must be pre-approved by the department chair. Must meet any course prerequisites.

- FDNT 150 - Foods **Credits: 3**
- FDNT 245 - Sports Nutrition **Credits: 3**
- FDNT 355 - Medical Nutrition Therapy I **Credits: 3**
- FDNT 402 - Community Nutrition **Credits: 3**
- FDNT 410 - Food, Nutrition, and Aging **Credits: 3**
- FDNT 458 - Advanced Human Nutrition **Credits: 4**
- FDNT 470 - Human Food Consumption Patterns **Credits: 3**

Total Minor Requirements: 18-19

Pan-African Studies Minor

The Pan-African Studies minor is a multidisciplinary program that brings together courses focusing on the vitality and accomplishments of pre-colonial African societies, the cultural and racial heritages of people of African descent in relationship to western societies, and aspects of modern-day African cultures. The cluster of courses included in this program represents a broad, diverse look at the diaspora of people of African origin. The minor helps students to enrich their cross-cultural studies; to heighten their awareness of and sensitivity to cultural diversity; and to expand their knowledge of world contributions of people of African heritage. A Pan-African Studies minor is thus valuable in an increasingly diverse society and attractive to employers and graduate schools alike.

Students must complete 18 credits to earn a minor in Pan-African studies. In addition to the one required course PNAF 131, at least three courses (9 credits) must come from Category A: Exclusively Pan-African-Focused courses. The remaining courses may come from either Category A or Category B: Substantially Pan-African-Focused courses. Because their content may vary, courses from Category B must be approved by the coordinator of Pan-African Studies to count for the minor. In addition, special topics, independent study, study abroad, and internship courses may be applied to either category with the approval of the program coordinator.

No more than 6cr taken for the minor may also count for the student's major.

Required Course: 3

- PNAF 131 - Introduction to Pan-African Studies **Credits: 3**

Category A: Exclusively Pan-African Focused: 9-15

- ANTH 271 - Cultural Area Studies: Africa **Credits: 3**
or
- SOC 271 - Cultural Area Studies: Africa **Credits: 3**
- COMM 380 - The History of African Americans in Film **Credits: 3**
- ECON 338 - Poverty in Africa **Credits: 3**
- ENGL 348 - African American Literature **Credits: 3**
- GEOG 255 - Geography of Africa **Credits: 3**
- HIST 355 - African History I: Antiquity to 1600 **Credits: 3**
- HIST 356 - African History II: 1600 to Present **Credits: 3**
- HIST 365 - History of Black America since Emancipation **Credits: 3**
- HIST 366 - African American Women **Credits: 3**
- PLSC 382 - Political Systems: Africa **Credits: 3**
- PNAF 281 - Special Topics in Pan-African Studies **Credits: 3**
PNAF 481 - Special Topics in Pan-African Studies **Credits: 3**
- PNAF 482 - Independent Study **Credits: 1-3**
- RLST 360 - African Religions **Credits: 3**

Category B: Substantially Pan-African Focused: 0-6

(1)

- ECON 339 - Economic Development I **Credits: 3**
- ENGL 398 - Global Genres **Credits: 3**
- JRNL 375 - World News Coverage **Credits: 3**
- PLSC 389 - International Development Strategies **Credits: 3**
- RLST 380 - Islam **Credits: 3**
- SOC 362 - Racial and Ethnic Minorities **Credits: 3**

Total Minor Requirements: 18

(1) Because their content may vary, courses from Category B must be approved by the Pan-African Studies coordinator in order to count for the minor.

For further information on this minor, contact the College of Humanities and Social Sciences, 201 McElhane Hall, 724-357-2280.

Philosophy Minor

Controlled Electives: 18

- Six PHIL courses (with restrictions) (1, 2)

Total Minor Requirements: 18

(1) No more than three 100- and 200-level courses may be counted toward the minor. Only PHIL courses may be counted toward the minor. Unless otherwise indicated in the Course Descriptions, all 300- and 400-level courses require either philosophy major or minor status, junior or senior standing, or permission of the instructor.

(2) No more than 3 non-classwork credits may be counted toward the minor. Non-classwork credits include independent study, independent honors project, and internship in philosophy.

Physics Minor

To minor in physics, a student must successfully complete 18-20 credits in physics consisting of at least 6 credits at the 300 level or higher.

Required Courses: 8

- PHYS 131 - Physics I-C Lecture **Credits: 3**
or
- PHYS 111 - Physics I Lecture **Credits: 3**
- PHYS 141 - Physics I-C Lab **Credits: 1**
or
- PHYS 121 - Physics I Lab **Credits: 1**
- PHYS 132 - Physics II-C Lecture **Credits: 3**
or
- PHYS 112 - Physics II Lecture **Credits: 3**
- PHYS 142 - Physics II-C Lab **Credits: 1**
or
- PHYS 122 - Physics II Lab **Credits: 1**

Additional Elective Courses: 12

At least 10 credits from the following, 6cr of which must be at 300 level or higher: (1)

- PHYS 231 - Electronics **Credits: 4**
- PHYS 331 - Modern Physics **Credits: 3**
- PHYS 342 - Thermal and Statistical Physics **Credits: 3**
- PHYS 355 - Computer Interfacing **Credits: 3**

Total Minor Requirements: 18-20

(1) Other courses may be considered with department recommendation.

Political Science Minor

Required Courses:

- PLSC 101 - World Politics **Credits: 3**
- PLSC 111 - American Government **Credits: 3**

Controlled Electives: 12

- Four additional PLSC courses, at least two of which must be 300 level or higher

Total Minor Requirements: 18

Pre-law Interdisciplinary Minor

Successful lawyers possess excellent skills in writing and speaking and can analyze a problem and explain its solution in clear, logical terms. The Pre-law minor prepares the student especially well in these areas and provides the skills and knowledge needed to do well in the law school admissions examination. This minor may be taken with any major other than those with a Pre-law Track. Although a pre-law minor is not required for law school admission, this interdisciplinary minor will provide students with the prerequisite skills for law school.

Seven Courses:

Seven courses, including at least one from each of the areas (no courses with student's major prefix):

Business:

- ACCT 201 - Accounting Principles I **Credits: 3**
- ACCT 202 - Accounting Principles II **Credits: 3**
- BLAW 235 - Legal Environment of Business **Credits: 3**

Criminology:

- CRIM 210 - Criminal Law **Credits: 3**
- CRIM 215 - Survey of Courts and the Criminal Justice System **Credits: 3**
- CRIM 225 - Survey of Corrections **Credits: 3**
- CRIM 255 - Law, Social Control, and Society **Credits: 3**

Economics:

- ECON 121 - Principles of Macroeconomics **Credits: 3**
- ECON 122 - Principles of Microeconomics **Credits: 3**
- ECON 332

English:

- ENGL 212 - American Literature: Beginnings to 1900 **Credits: 3**
- ENGL 227 - Introduction to Legal Writing **Credits: 3**
- ENGL 265 - Law and Literature **Credits: 3**
- ENGL 310 - Public Speaking **Credits: 3**
- ENGL 321 - Persuasive Speech and Writing **Credits: 3**

History:

- HIST 320 - History of England to 1688 **Credits: 3**
- HIST 341 - American Revolution **Credits: 3**
- HIST 342 - The Early Republic **Credits: 3**
- HIST 346 - Recent United States History **Credits: 3**
- HIST 475 - History of American Constitutionalism **Credits: 3**

Philosophy:

- PHIL 101 - Critical Thinking **Credits: 3**
- PHIL 122 - Contemporary Moral Issues **Credits: 3**
- PHIL 130 - Introduction to Biomedical Ethics **Credits: 3**
- PHIL 221 - Symbolic Logic I **Credits: 3**
- PHIL 270 - Ethics and the Environment **Credits: 3**
- PHIL 320 - Ethical Theory **Credits: 3**
- PHIL 450 - Philosophy of Law **Credits: 3**

Political Science:

- PLSC 358 - Judicial Process **Credits: 3**
- PLSC 359 - Constitutional Law and Civil Liberties **Credits: 3**
- PLSC 361 - Modern Political Thought **Credits: 3**
- PLSC 405 - Sexuality and Law **Credits: 3**

Total Minor Requirements: 21

Professional Teamwork and Leadership Minor

The Professional Teamwork and Leadership minor is an interdisciplinary program that aims to better prepare students for a competitive job market by instilling interpersonal, teamwork, and communication skills for use in their field. Employers of today seek job candidates who possess a strong set of technical skills, but strongly prefer someone who can also work in a team environment. Ninety percent of employers believe that team skills are equally, or even more important, than technical skills when hiring. This minor provides students with ways to stand out from the crowd.

The minor is open to all IUP students and provides three pathways to best acquire the necessary team and leadership skills:

Applications of Teamwork and Leadership: Links the theory of teamwork and leadership to applications within your chosen field. Employers seek graduates who pursue opportunities to develop and apply their team and leadership skills through current, real-world problems that graduates will face during employment.

Business Leadership Theory: Explores top leadership theories and models, the motivation of teams, cooperate social responsibility, foundations of commercial sustainability, and corporate ethics in the regional and global marketplaces.

Community and Civic Leadership Theory: Explores the team and leadership theories regarding the evaluation and planning of services, managing, and motivating teams of volunteers while building intergovernmental and intraorganizational relationships.

Successful leaders have confidence in their abilities, are passionate, possess strong values, are excellent planners and organizers as well as effective communicators. These attributes are imperative to solving key problems. The minor will build students' identities as team members and leaders, transform and enhance their thought processes, and provide an expanded toolkit to cultivate effective teams.

The addition of the minor is practical for all majors, particularly those programs with few free electives looking to add more value and marketability. This minor will expose students to understanding how their beliefs, attitudes, and actions affect the team as well as how the diversity of the team adds strength and additional perspective to solve complex problems facing society. Students will learn how to engage audiences with nontechnical and technically rich content, frame and present arguments, and develop the ability to speak about their work and its significance. Traits of good team members and leaders will be examined and applied through case studies or by solving current, real-world problems in in-major projects within their required coursework. The capstone course, coupled with the teamwork intensive course, provides direct opportunities for students to develop and apply their team and leadership skills within their chosen field. Students will reflect on the personal qualities and attributes they bring to a team and prepare materials that best illustrate these skills to future employers.

Core Courses: 13

(1)

- LDSP 461 - Leadership Capstone **Credits:** 1
- MGMT 461 - Organizational Leadership Theory **Credits:** 3
- SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits:** 3
- THTR 161 - Introduction to Theatre: Interpersonal Practices **Credits:** 3
- Any 100-level PHIL course **Credits:** 3

Select one Professional Teamwork and Leadership Pathway:

Applications of Teamwork and Leadership: 6-7

Links the theory of teamwork and leadership to applications within your chosen field. Employers seek graduates who pursue opportunities to develop and apply their team and leadership skills through current, real-world problems that graduates will face during employment.

- COMM 261 - Teamwork and Communication Skills for College and Career **Credits:** 3
or
- JRNL 361 - Presentation Making **Credits:** 3 (2)
- A Teamwork-Intensive Course **Credits:** 3-4

Business Leadership Theory: 6

Explores top leadership theories and models, motivation of teams, cooperate social responsibility, foundations of commercial sustainability, and corporate ethics in the regional and global marketplaces. (3)

- BCOM 321 - Business and Interpersonal Communications **Credits:** 3
- MGMT 461 - Organizational Leadership Theory **Credits:** 3

Community and Civic Leadership Theory: 8-9

Explores the team and leadership theories regarding evaluation and planning of services, managing, and motivating teams of volunteers while building inter-governmental and intra-organizational relationships.

- COMM 261 - Teamwork and Communication Skills for College and Career **Credits: 3**
or
- JRNL 361 - Presentation Making **Credits: 3**
- PLSC 370 - The Practice of Public Administration **Credits: 3**
or
- PSYC 390 - Industrial-Organizational Psychology **Credits: 3**
or
- SOC 345 - Interpersonal Dynamics **Credits: 3**

Total Minor Requirements:

(1) COMM 261, JRNL 361, PHIL 122, THTR 161, and SOC 161 can count as one or more liberal studies requirements. Honors College students can satisfy PHIL 122, THTR 161, and SOC 161 by taking the appropriate HRNC core courses. THTR 111 is a substitute for THTR 161.

(2) At least one course from pathway is required to be of 300-or 400-level coursework. If possible, take an in-major teamwork- intensive course, elective, or writing intensive requirement. Ensure the section chosen has the Teamwork-Intensive course attribute.

(3) Non-MGMT students in the Business Leadership Theory pathway may substitute the following courses for the core PHIL course: MGMT 311 or MGMT 432 .

Psychology Minor

Required Courses:

- PSYC 101 - General Psychology **Credits: 3** (1)
- PSYC 200 - Psychological Research I **Credits: 3** (2)
or
- PSYC 280 - Psychological Inquiry **Credits: 3**
- Four other PSYC electives beyond PSYC 101 (3,4)

Total Minor Requirements: 18

- (1) Meets Liberal Studies requirement.
- (2) Prerequisite: Grade of C or better in MATH 217.
- (3) Selected in consultation with the minor advisor.
- (4) At least six credits must be at the 300-level or higher.

Regional Planning Minor

A minor in regional planning is appropriate for majors in all other fields of the natural and social sciences. Students in marketing and information systems will find a minor in this field relevant. A minor consists of 18 credits in courses taken with the RGPL prefix. The department suggests students take the core in this program if graduate study is anticipated.

Controlled Electives:

- Six RGPL courses **Credits: 18** (1)

Total Minor Requirements: 18

(1) Only courses taken as RGPL may be counted toward the minor.

Religious Studies Minor

The requirements for a minor are 18 credits with the RLST prefix, including certain required courses. At least 6 credits must be taken at the 300 level or higher.

Required Courses:

Core:

- RLST 300 - Methodologies of Religious Studies **Credits: 3**

Abrahamic:

- RLST 380 - Islam **Credits: 3**
or
- RLST 385 - Christianity **Credits: 3**
or
- RLST 388 - Interpreting the Bible **Credits: 3**

Asian:

One of the following:

- RLST 311 - Eastern Philosophy **Credits: 3**
- RLST 370 - Religions: China and Japan **Credits: 3**
- RLST 373
- RLST 375 - Religions of India **Credits: 3**
- RLST 378 - Hinduism **Credits: 3**

Indigenous:

- RLST 360 - African Religions **Credits: 3**
or
- RLST 365 - Native North American Religions **Credits: 3**

Capstone Course:

One capstone course:

- RLST 401 - Topics in Abrahamic Traditions **Credits: 3**
- RLST 402 - Topics in Asian Religions **Credits: 3**
- RLST 403 - Topics in Indigenous Religions **Credits: 3**

Elective:

- One RLST course **Credits: 3**

Total Minor Requirements: 18

(1) At least 6cr must be taken at the 300 level or higher.

Restaurant and Food Service Management Minor

The Restaurant and Food Service Management Minor prepares students with the skills to be a successful food service manager. This minor prepares students to manage and operate a food production system by developing skills in food sanitation, food preparation skills, menu planning, front and back of the house operations, and responsible alcohol service.

Required Courses:

- HOSP 130 - Food Service Sanitation **Credits: 1**
- HOSP 220 - Food Service Operations **Credits: 3**
- HOSP 330 - Applications of Food Production and Service **Credits: 4 (1, 2)**
- HOSP 402 - Beverage Management **Credits: 3**
- HOSP 403 - Wine and Wine Service **Credits: 3**
- HOSP 413 - Restaurant Food Production and Service **Credits: 4 (1, 2)**

Total Minor Requirements: 18

(1) Department-specified kitchen food preparation uniform and knife kit are required for lab courses.

(2) Students are required to show proof of approved safe food handling certification.

Safety, Health, and Environmental Applied Sciences Minor

The minor consists of 18 credits in safety, health, and environmental applied sciences courses as identified below. The minor has improved job opportunities for students in environmental geoscience, criminology, human resource management, international business, and management.

Required Courses:

- SAFE 101 - Introduction to Occupational Safety and Health **Credits: 3**
- SAFE 111 - Principles of Safety I—General Industry **Credits: 3**
- SAFE 220 - Hazardous Materials and Emergency Management **Credits: 3**
- SAFE 310 - Environmental Safety and Health Regulations and Sustainability **Credits: 3**

Controlled Electives: 6

SAFE courses approved by department chair totaling at least 6cr with at least 3cr being in 300-level or higher course(s). SAFE 100 , The Science of Living Safely, does not count toward the minor degree requirements.

Total Minor Requirements: 18

Sociology of Disability Services Minor

Required Courses:

- SOC 151 - Principles of Sociology **Credits: 3**
or
- SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3**
- SOC 391 - Foundations of Sociological Practice **Credits: 3**
- SOC 392 - Clinical Sociological Practice **Credits: 3**
- SOC 442 - Medical Sociology **Credits: 3**
- SOC 452 - Disability and Society **Credits: 3**

Controlled Electives:

One course from the following:

- SOC 336 - Sociology of the Family **Credits: 3**
- SOC 357 - Sociology of Aging and the Life-course **Credits: 3**

Total Minor Requirements: 18

Spanish Minor

Required Courses:

- SPAN 220 - Intermediate Spanish Conversation **Credits: 3**
- SPAN 230 - Intermediate Spanish Composition and Grammar **Credits: 3**
- SPAN 260 - Introduction to Hispanic Literature **Credits: 3**
- SPAN 330 - Advanced Spanish Composition and Grammar **Credits: 3**
- Two additional courses at the SPAN 3XX or 4XX level (except SPAN 390) **Credits: 6**

Total Minor Requirements: 18

Special Education Minor

Completion of the Special Education minor will prepare students to have a better understanding of the social, emotional, and learning characteristics of individuals with mental retardation, autism, developmental disabilities, learning disabilities, brain injuries, emotional and behavioral disorders, physical disabilities, and multiple disabilities.

In addition, students taking this minor will develop a thorough understanding of PL 105-17, Individuals with Disabilities Education Act (IDEA), which addresses the rights of individuals and parents regarding inclusion in the regular classroom, delivery of services in inclusive settings, and transition planning.

The Special Education minor is an 18-credit program with 3 required and 15 elective credits. The required credits are met through enrollment in EDEX 111. This course provides essential information regarding IDEA (PL 105-17) as well as an overview of the field of special education, thus allowing the minor candidate to select a more focused area of concentration.

This minor would be of interest to sociology, psychology, child development and family relations, criminology, and secondary education majors who are interested in interacting or working with individuals with disabilities. To be accepted into the minor, a student must have a minimum 2.5 cumulative GPA.

Required Course: 3

- EDEX 111 - Introduction to Exceptional Persons **Credits: 3**

Controlled Electives: 15

Five courses from the following:

- EDEX 340 - Introduction to Behavior Management in Special Education **Credits: 3**
- EDEX 415 - Preschool Education for Children with Disabilities **Credits: 3**
- EDEX 458 - Transition Assessment and Planning for Youth with Disabilities **Credits: 3**
- EDEX 460 - Family Perspectives on Disability **Credits: 3**
- EDEX 469 - Education of Persons with Emotional/Behavioral Disorders, Learning Disabilities or Brain Injury **Credits: 3**
- EDEX 478 - Education of Persons with Mental Retardation/Developmental Disabilities and Physical/ Multiple Disabilities **Credits: 3**

Total Minor Requirements: 18

Special Event/Tourism Management Minor

The Special Event/Tourism Management Minor introduces students to the planning, organizing, influencing, and controlling of special event functions and the social, cultural, environmental and economic processes linked to the tourism industry. This minor provides the option to select industry specific courses that meet their individual career goals in areas of professional wedding planning, fund-raising, catering, festivals, destination management, international tourism, and event management.

Required Courses: 9

- HOSP 235 - Tourism Management **Credits: 3**
- HOSP 280 - Special Event Management **Credits: 3**
- HOSP 347 - Meeting and Convention Management **Credits: 3**

Controlled Electives: 9

- HOSP courses approved by department chair totaling at least 9cr with at least 3cr being 300 level or higher.

Total Minor Requirements: 18

Sport Management Minor

This minor is recommended for students majoring in related disciplines such as exercise science, health and physical education, athletic training, accounting, communications media, economics, finance, human resource management, management, and marketing and for students who have a personal interest in sport management. It provides students with the necessary skills to work in management within the sport industry.

Required Courses: 12

- KHSS 292 - Introduction to Sport Management **Credits: 3**
- KHSS 320 - Managing Facilities and Events in Sport **Credits: 3**
- KHSS 445 - Business Practices in Sport **Credits: 3**
- KHSS 460 - Law and Issues in Managing Sport **Credits: 3**

Controlled Electives: 6

Two courses from the following:

- ECON 239 - Economics of Sports **Credits: 3**
- KHSS 270 - Sport Communication **Credits: 3**
- KHSS 280 - Aquatic Management and Operation **Credits: 3**
- KHSS 335 - Athletic Coaching **Credits: 3**
- KHSS 351 - Managing Budgets and Technology in Sport **Credits: 3**

- KHSS 493 - Internship **Credits:** 1-12

Total Minor Requirements: 18

Sustainability Studies Minor

The Sustainability Studies minor is an interdisciplinary program that draws from expertise across the university. The program conceptualizes "sustainability" as an interdisciplinary approach to knowledge production and action that focuses on "the health and integrity of human societies and the natural world." Sustainability is classically defined as a stool with three legs—the social, the economic, and the environmental. The purpose of this program is to address the challenges of sustainability by balancing the humanities, social sciences, and natural sciences. The minor equips students to broaden their thinking about the origins of sustainability problems and possible solutions to include human institutions, ethics, and cultures as well as technologies and natural sciences. In so doing, the minor aims to foster student agency with regard to research on sustainability, responsibility to both human and non-human life, and civic engagement with local sustainability projects. The minor can supplement all majors in the university. Career possibilities include positions in design, law, food industries, planning and architecture, education, building certification, renewable energy, and waste management.

Students must complete 18 credits and a capstone experience (described below) to earn a minor in sustainability studies. The program's interdisciplinary approach encourages students to take courses from a variety of departments. The program is structured as follows:

- All students will take SUST 201 - Introduction to Sustainability Studies.
- Students must then take at least 12 credits from Category A, defined as courses in which substantial content is foundational to engagement with sustainability. These credits must be distributed across three "clusters," each of which denotes a major aspect of sustainability. Having taken one course from each of the three clusters, students will then be able to take the remaining Category A credits from a cluster of their choosing.
- Only 3 credits may come from Category B, defined as courses in which significant content is foundational to engagement with sustainability. Because their content may vary, courses from Category B must be approved by the program director to count for the minor.
- At least 6cr must be at the 300 level or above.
- Only one course may come from the student's major.
- With the exception of SUST courses, no course prefix may be used more than twice without written permission from the program director.
- Special topics, independent study courses, and internship courses may be applied to either Category A or Category B with the approval of the Sustainability Studies Committee.
- Students should consult with the program director to determine if there are any prerequisites for the courses. Through counseling, the program coordinator will work with individual departments to determine if students may qualify for prerequisite exemptions.
- Students will work with an advisor from the Sustainability Studies program to develop a capstone experience that synthesizes their knowledge and skills related to sustainability. This requirement may be fulfilled by one of the following options: a portfolio, conference presentation, or other scholarly activity approved by the program director.

Required Course: 3

- SUST 201 - Introduction to Sustainability Studies **Credits:** 3

Category A: 12-15

Cluster I: Ethics, Culture, and Society

- ANTH 420 - Environmental Anthropology **Credits:** 3
- ANTH 430 - Anthropology of Food **Credits:** 3
- ANTH 470 - Environmental Archaeology **Credits:** 3
- ENGL 361 - Environmental Literature **Credits:** 3
- GEOG 230 - Cultural Geography **Credits:** 3
- HIST 385 - People in Nature: An Introduction to Environmental History **Credits:** 3
- PHIL 270 - Ethics and the Environment **Credits:** 3

- RLST 365 - Native North American Religions **Credits: 3**
- SOC 314 - Sociology of Native Americans **Credits: 3**

Cluster II: Natural Sciences and Environmental Stewardship

- BIOL 103 - Life on Earth **Credits: 4**
- BIOL 115 - Biotic Diversity of North America **Credits: 3**
- BIOL 201 - Principles of Ecology and Evolution **Credits: 4**
- BIOL 221 - Environmental Health and Protection **Credits: 4**
- BIOL 272 - Conservation of Plant and Animal Resources **Credits: 3**
- BIOL 362 - Ecology **Credits: 3**
- BIOL 450 - Field Biology at Pymatuning Laboratory of Ecology **Credits: 4**
- BIOL 490 - Field Studies in Biology **Credits: 1-4**
- ENVE 301 - Environmental Aquatic Chemistry **Credits: 4**
- GEOG 101 - Environment and Society **Credits: 3**
- GEOG 341 - Climatology **Credits: 3**
- GEOG 435 - Geography of Energy **Credits: 3**
- GEOS 101 - The Dynamic Earth **Credits: 3**
- GEOS 103 - Oceans and Atmospheres **Credits: 3**
- GEOS 155 - Geology of Climate Change **Credits: 3**
- GEOS 156 - Geology of Natural Disasters **Credits: 3**
- GEOS 204 - Historical Geology **Credits: 4**
- GEOS 310 - Environmental Geology **Credits: 4**
- GEOS 370 - Oceanography **Credits: 4**
- PHYS 101 - Energy and Our Environment **Credits: 3**
- PSYC 331 - Environmental Psychology **Credits: 3**
- SAFE 310 - Environmental Safety and Health Regulations and Sustainability **Credits: 3**

Cluster III: Environmental Policy, Economics, and Law

- CRIM 374 - Environmental Crime and Justice **Credits: 3**
- ECON 361 - Environmental Economics **Credits: 3**
- ENVE 101 - Introduction to Environmental Engineering **Credits: 3**
- FDNT 415 - Sustainable Nutrition **Credits: 3**
- FDNT 470 - Human Food Consumption Patterns **Credits: 3**
- RGPL 103 - Global Cities: Planning and Development **Credits: 3**
- GEOG 104 - World Geography: Global Context **Credits: 3**
- GEOG 231 - Economic Geography **Credits: 3**

- GEOG 343 - Fresh Water Resources **Credits: 3**
or
- RGPL 343 - Fresh Water Resources **Credits: 3**

- GEOG 345 - Biogeography for Environmental Managers **Credits: 3**
or
- RGPL 345 - Biogeography for Environmental Managers **Credits: 3**

- GEOG 440 - Conservation: Environmental Analysis **Credits: 3**
or
- RGPL 440 - Conservation: Environmental Analysis **Credits: 3**

- MKTG 444 - Green Marketing **Credits: 3**
- RGPL 426 - Environmental Land Use Planning **Credits: 3**

Category B

- ANTH 110 - Contemporary Anthropology **Credits: 3**
- ANTH 213 - World Archaeology **Credits: 3**
- ANTH 240 - Introduction to Global Health **Credits: 3**
- ANTH 314 - Contemporary Native American Cultures **Credits: 3**
- ANTH 352 - The Anthropology of Human Rights **Credits: 3**
- ANTH 444 - Medical Anthropology **Credits: 3**
- ART 113 - Three-Dimensional Design **Credits: 3**
- ART 213 - Woodworking: Function and Form **Credits: 3**
- BIOL 301 - Fundamentals of Epidemiology **Credits: 3**
- BIOL 323 - Introduction to Toxicology and Risk Assessment **Credits: 3**
- BIOL 456 - Ecological Toxicology **Credits: 3**
- ECON 338 - Poverty in Africa **Credits: 3**
- ECON 339 - Economic Development I **Credits: 3**
- GEOS 150 - Geology of National Parks **Credits: 3**
- GEOS 152 - Physical Resources of the Earth **Credits: 3**
- GEOS 201 - Foundations of Geology **Credits: 4**
- GEOS 324 - Geology of Oil and Gas **Credits: 4**
- JRNL 375 - World News Coverage **Credits: 3**
- JRNL 466 - Community Journalism **Credits: 3**
- NURS 101 - Disaster Awareness **Credits: 1**
- NURS 143 - Healthy People—Promoting Wellness **Credits: 3**
- PHIL 122 - Contemporary Moral Issues **Credits: 3**
- PHIL 130 - Introduction to Biomedical Ethics **Credits: 3**
- PLSC 250 - Public Policy **Credits: 3**
- PLSC 389 - International Development Strategies **Credits: 3**
- RLST 485 - Selected Topics in Feminist Studies of Religion **Credits: 3**
- SOC 337 - Society, Globalization, and Risk **Credits: 3**
- SOC 417 - Global Service Learning **Credits: 3**

Total Minor Requirements: 18

Theatre Minor

The Theatre minor provides a foundation; students must meet with the department chair for initial advisement to be admitted into the minor. The minor will be tailored to individual student goals with a course plan.

Required Course: 3

- THTR 111 - Foundations of Theater **Credits: 3**

One Course from the Following: 3

- THTR 120 - Stagecraft **Credits: 3**
- THTR 122 - Costume Workshop **Credits: 3**
- THTR 221 - Basic Stage Lighting **Credits: 3**
- THTR 486 - Practicum in Production **Credits: 0-3 (2)**

Electives: 12-15

- Courses with a THTR prefix as advised

Total Minor Requirements: 18

(1) THTR 101 satisfies the Liberal Studies Fine Arts requirement but may not be counted toward the Theatre minor.

(2) Practicum credit is gained through assignment to theatre and dance company productions under the supervision of a faculty member. It is usually granted at 1-2cr for an assignment. Therefore, more than one assignment will need to be completed if a student wishes to accumulate exactly 18cr in the minor. It is possible to complete one practicum assignment and complete the balance of the minor with additional electives. This will usually result in 19 or 20cr in the minor.

(3) Six credits at 300 level or above is required.

Wildlife and Conservation Biology Minor

The Wildlife and Conservation Biology minor is intended for students to gain knowledge and tools to study, conserve and understand the impact of habitat on wildlife species. This minor would be a perfect fit for a Pre-veterinary major as it would provide skills and career opportunities in government, private, academic institutions in the area of aquatic or wildlife sciences, ecological conservation or management, and education.

Required Courses:

- BIOL 205 - Ecological Methods **Credits: 3**
- BIOL 272 - Conservation of Plant and Animal Resources **Credits: 3**
- BIOL 362 - Ecology **Credits: 3**

Controlled Electives:

(1,2)

- BIOL 261 - Ornithology **Credits: 3**
- BIOL 310 - Applied Entomology and Zoonoses **Credits: 3**
- BIOL 352 - Comparative Animal Physiology **Credits: 3**
- BIOL 425 - Herpetology **Credits: 3**
- BIOL 431 - Ichthyology **Credits: 3**

- BIOL 450 - Field Biology at Pymatuning Laboratory of Ecology **Credits: 4**
or
- BIOL 490 - Field Studies in Biology **Credits: 1-4**

- BIOL 451 - Evolutionary Biology **Credits: 3**
- BIOL 455 - Animal Behavior **Credits: 3**
- BIOL 475 - Mammalogy **Credits: 3**
- BIOL 481 - Special Topics **Credits: 1-3**

Total Minor Requirements: 18-19

(1) Other appropriate BIOL courses at 200 level and above may be substituted on permission of the advisor and the Biology department chair in advance of taking the course.

(2) No more than two of major's courses can apply (excluding prerequisite, liberal studies, cognate or college core courses) towards minor.

Women's and Gender Studies Minor

Website: www.iup.edu/womens

Lynn Botelho, Director

The Women's and Gender Studies minor is designed to increase students' interdisciplinary knowledge about the gendered nature of women's experiences and the ways that all genders are shaped by history, culture, and society. In order to achieve this goal, the program offers courses using a variety of theories and methodologies from a range of disciplines, such as anthropology, art, communication media, criminology, film, the fine arts, history, journalism and public relations, literature, philosophy, political science, psychology, religious studies, and sociology. The program explores gendered hierarchies and the impact of gender on the experiences of women, as well as women- and gendered-centered knowledge productions and learning. Students are encouraged to challenge traditional theories and research regarding women and gender through innovative and experimental classroom experiences and writing assignments. Students analyze the world, imagine and re-envision it, and seek to enact social transformation in both theory and practice.

A minor in women's and gender studies strengthens and supplements every academic major and later professional careers. Students' awareness of gendered, sexualized, classed, and racialized hierarchies make them valuable professionals in a range of careers, from business and banking to social work and law.

Required Course: 3

- WGS 200 - Introduction to Women's and Gender Studies **Credits: 3**

Other Requirements:

Students receive approval for a specified course of study from the following list of courses: (1, 2, 3)

- ANTH 350 - Anthropology of Gender **Credits: 3**
- ASIA 106 - Samurai and Gongfu Heroes: Masculinity in East Asia **Credits: 3**
or
- HIST 106 - Samurai and Gongfu Heroes: Masculinity in East Asia **Credits: 3**
- COMM 325 - Gender in Media **Credits: 3**
- CRIM 450 - Women and Crime **Credits: 3**
- ENGL 225 - Introduction to Literature by Women **Credits: 3**
- ENGL 336 - Language, Gender, and Society **Credits: 3**
- ENGL 350 - Gender and Sexual Orientation in Literature, Theory, and Film **Credits: 3**
- HIST 369 - Women in America **Credits: 3**
- HIST 390 - History of Women—World Cultures **Credits: 3**
- JRNL 250 - Women and the Press **Credits: 3**
- PLSC 404 - Women and Politics **Credits: 3**
- PSYC 379 - Psychology of Human Sexuality **Credits: 3**
- PSYC 380 - Gender and Violence **Credits: 3**
- PSYC 411 - Psychology of Women **Credits: 3**
- RLST 245 - Women and Religion **Credits: 3**
- RLST 345 - Women in the Bible **Credits: 3**
- RLST 485 - Selected Topics in Feminist Studies of Religion **Credits: 3**
- SOC 251 - Sociology of Human Sexuality **Credits: 3**
- SOC 363 - Sociology of Gender **Credits: 3**
- SOC 410 - Men and Masculinities **Credits: 3**
- SOC 427 - Social Perspectives on Intimate Partner Violence **Credits: 3**
- WGS 301 - Asian American and Asian Diasporic Women's Literature **Credits: 3**
- WGS 400 - Feminist Theories **Credits: 3**
- WGS 482 - Independent Study **Credits: 1-3**
- XXXX 281 - Special Topics (offered within department) **Credits: var-1-3 (4)**
- XXXX 481 - Special Topics (offered within department) **Credits: var-1-3 (4)**
- XXXX 493 - Internship **Credits: var-1-3 (5)**

Total Minor Requirements: 18

(1) Students receive approval for a specified course of study from the above list of courses and, with permission from the director of Women's and Gender Studies, from selected WGS courses that have been recently developed.

(2) No more than two courses that for a student's major can also count for the Women's and Gender Studies minor.

(3) At least 6cr of coursework must be at 300 level or above.

Certificate and Certification Programs

Athletic Coaching Certificate

This certificate is recommended for students majoring in disciplines such as exercise science, health and physical education, athletic training, and education and for students who have a personal interest in coaching as a profession. It provides students with the necessary skills to work in the athletic coaching industry. Students will have a chance to earn a variety of certifications, including ASEP Coaching Certification, Certified Disability Sport Specialist, Certified Special Olympics Coach.

Required Courses: 17

- KHSS 175 - Prevention and Care of Injuries to the Physically Active **Credits: 2**
- KHSS 209 - Motor Behavior **Credits: 3 (1)**
- KHSS 333 - Psychology of Coaching **Credits: 3 (1)**
- KHSS 335 - Athletic Coaching **Credits: 3 (1)**
- KHSS 437 - Coaching Disability Sport **Credits: 3 (1)**
- KHSS 493 - Internship **Credits: 1-12**

Controlled Elective: 3

One course from the following:

- KHSS 221 - Human Structure and Function **Credits: 3**
- KHSS 256 - Applied Human Structure and Conditioning **Credits: 3 (1)**
- KHSS 292 - Introduction to Sport Management **Credits: 3 (1)**

Total Certificate Requirements: 20

(1) Courses have been designed as distance education courses.

Audio Production Certificate

Prepares students for careers producing, recording, mixing, and mastering audio. This 18-credit certificate requires students to take five 3-credit core courses and an additional 3 credits for electives. Completion of this certificate will help prepare students for positions in many fields including, radio, film and television in which knowledge of audio production techniques and technology is required. Majors from other departments will be able to declare a communications media minor along with receiving the certificate.

Core Courses: 15

- COMM 101 - Introduction to Communications, Media, and Culture **Credits: 3**
- COMM 249 - Basic Audio Recording Techniques **Credits: 3**
- COMM 349 - Radio Production **Credits: 3**

- COMM 350 - Digital Storytelling **Credits:** 3
- COMM 449 - Advanced Audio Recording Techniques **Credits:** 3

Elective: 3

- COMM 281 - Special Topics **Credits:** 1-3 (1)
- COMM 354 - Media Law and Policy **Credits:** 3
- COMM 390 - Practicum in Communications **Credits:** 1-3 (1)
- COMM 401 - Media Programming and Promotion **Credits:** 3
- COMM 403 - Multimedia News Writing **Credits:** 3
- COMM 408 - Media Field Studies **Credits:** 3
- COMM 414 - Music, Media, and Culture **Credits:** 3
- COMM 451 - Multimedia News Production **Credits:** 3
- COMM 470 - Media Management and Sales **Credits:** 3
- COMM 477 - Freelancing and Entrepreneurship in Media **Credits:** 3
- COMM 480 - Seminar in Communications Media **Credits:** 3 (1)
- COMM 481 - Special Topics **Credits:** 1-3

Total Certificate Requirements: 18

(1) As appropriate depending on topic; approval required.

Baking and Pastry Certificate

Website: <https://www.iup.edu/culinary/programs/culinary-and-baking-and-pastry>

The Department of Culinary Arts also offers a 16-month, non-credit Certificate in Baking and Pastry. This program is accredited by the American Culinary Federation.

Behavior Analysis Certificate

Provides the student with the specific knowledge and skills necessary to function as a Board Certified Assistant Behavior Analyst (BCaBA). Courses are aligned to the requirements of the Behavior Analyst Certification Board and satisfy one of the three requirements to be eligible to become a BCaBA.

Required Courses:

The two remaining requirements, supervised field experience and earning a passing score on the BCaBA examination, are not part of this undergraduate certificate.

- EDEX 340 - Introduction to Behavior Management in Special Education **Credits:** 3
- EDEX 435 - Methods and Curriculum—Severe Cognitive Disabilities **Credits:** 3
- EDEX 440 - Ethical and Professional Behavior **Credits:** 1
- EDEX 469 - Education of Persons with Emotional/Behavioral Disorders, Learning Disabilities or Brain Injury **Credits:** 3
EDEX 476 Foundations of Behavioral Analysis

Cell and Molecular Biology Certificate

For Biology majors and non-majors who wish to obtain specialized training in cell and molecular biology, the department offers a 16-credit sub-baccalaureate certificate program that consists of a five core Biology course sequence. Completion of the certificate will help to

prepare students for positions in the modern biotechnology workforce. Applications are available at 114 Weyandt Hall. For more information, call 724-357-2352.

Core Courses: 16

- BIOL 202 - Principles of Cell and Molecular Biology **Credits:** 4
- BIOL 203 - Principles of Genetics and Development **Credits:** 4
- BIOL 331 - Developmental Biology **Credits:** 3
- BIOL 405 - The Biology of the Cell - Critical Thinking **Credits:** 2
- BIOL 430 - Gene Editing Tools in Medicine and Biotechnology **Credits:** 3

Total Certificate Requirements: 16

Center for Transportation, Teacher certification in Safety/Driver Education

Website: www.iup.edu/rural-health-safety/center-for-transportation

The Center for Transportation focuses on improving safety through injury prevention by offering teacher certification in safety/driver education, driver training programs, and by coordinating community programs and events that promote safe driving. Injury is the leading cause of death for persons age 1 to 44. Unintentional motor vehicle traffic crashes remain the leading cause of injury death for those age 5 to 24 and the second leading cause of injury death for those age 1 to 4 and 25 and older.

Teacher certification in Safety/Driver Education is the last program of its kind in Pennsylvania that certifies teachers and instructors to teach driver education. The Driver Education Certification program requires completion of four core courses through cooperative effort with the Department of Kinesiology, Health, and Sport Science.

From **Novice Driver Education** programs for beginning drivers to **Advanced Driver Training** programs in emergency driving techniques, including perceptual driving, the IRHS provides a cadre of courses, all designed to meet the needs of the student.

Community Traffic Safety projects are Community Health Education projects that are federally funded and contracted with the Pennsylvania Department of Transportation's Bureau of Maintenance and Operations. Originating at IUP in 1987, programs and trainings for corporations, schools, civic groups, law enforcement agencies, etc., include topics such as occupant protection, impaired driving, distracted driving, aggressive driving, safe driving near heavy trucks, motorcycles and other vulnerable road users, and safety while walking and bicycling, with emphasis on young drivers and mature drivers.

A secondary focus for the Center for Transportation is on health by reducing obesity and increasing physical activity. According to the National Institutes of Health, obesity and overweight are the second leading causes of preventable death in the US, behind only tobacco use. Center staff teach courses in active transportation planning, complete walkability assessments, and promote walk- and bike-friendly places to foster healthy communities in Pennsylvania.

Chemistry Honors, Certificate

Liberal Studies: 14

As outlined in the Liberal Studies Requirements section with the following specifications:

Mathematics:

- MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits:** 3

Natural Science:

- PHYS 131 - Physics I-C Lecture **Credits: 3**
- PHYS 141 - Physics I-C Lab **Credits: 1**
and
- PHYS 132 - Physics II-C Lecture **Credits: 3**
- PHYS 142 - Physics II-C Lab **Credits: 1**

Liberal Studies Electives: 3

- MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3**

Core Courses: 9

- CHEM 442 - Advanced Physical Chemistry **Credits: 3**
(2)
- CHEM 498 - Problems in Chemistry **Credits: 1-2**
- MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits: 3**

Elective Course: 3

- MATH 171 - Introduction to Linear Algebra **Credits: 3**
or any BIOL, COSC, GEOS, MATH or PHYS course at the 300-level or above (3)

Total Certificate Requirements: 26

(1) Honors certificate also requires a presentation of research during departmental seminar.

(2) Meets 3cr of CHEM controlled elective.

(3) This requirement may also be met by taking an additional 3cr at the 400-level in CHEM or BIOC.

China Studies Certificate

(1, 2, 3, 4)

The China Studies Certificate is a 15-credit program that allows students to pursue studies that focus on one or more disciplinary areas focused on China. Students who wish to pursue graduate-level studies and/or a career in a China-related field may want to add this credential to their main academic preparation. Others who have an interest in Chinese society and culture can also benefit from this certificate.

Core Courses: Primarily China-Focused Courses: 12-15

(2)

- ANTH 272 - Culture Area: China **Credits: 3**
- ANTH 333 - The Archaeology of Early China **Credits: 3**
- ARHI 425 - Arts of China **Credits: 3**
- CHIN - Chinese Language Courses **Credits: 4 (5)**
- HIST 332 - History of Early China **Credits: 3**
- HIST 433 - China 1300-1800: The Late Imperial Age **Credits: 3**
- HIST 434 - Modern China 1800-present **Credits: 3**

Electives: East Asia-Focused Courses: 0-3

- HIST 106 - Samurai and Gongfu Heroes: Masculinity in East Asia **Credits: 3**
or
- ASIA 106 - Samurai and Gongfu Heroes: Masculinity in East Asia **Credits: 3**
- HIST 206 - The History of East Asia **Credits: 3**
- PLSC 383 - Political Systems: Asia **Credits: 3**
- RLST 311 - Eastern Philosophy **Credits: 3**
- RLST 370 - Religions: China and Japan **Credits: 3**
- RLST 374 - Buddhism **Credits: 3**

Total Certificate Requirements: 15

(1) Courses need to be in at least two different prefixes.

(2) The subject matter varies in rotating topic courses (e.g., HIST 497, RLST 485 etc.); and special topics courses (i.e. classes numbered 281 and 481). When concerned with Asian Studies, these courses may be applied to either the China-focused or East Asia-focused categories with the approval of the Asian Studies Coordinator.

(3) Three credits of an appropriate internship can count towards the certificate with the approval of the Asian Studies Coordinator.

(4) No more than 6 transfer credits may be counted towards the certificate.

(5) No more than 3cr from an appropriate language class may be counted toward the certificate.

Criminal Justice Training

Website: www.iup.edu/crimjustice

The Criminal Justice Training Center (CJTC) provides high-quality education and training programs for the continuing professionalism of the criminal justice system. The CJTC is one of only 17 schools in the commonwealth certified to offer Act 120 training, an 919-hour program that qualifies graduates to be municipal police officers. The police academy is located at the Indiana campus at IUP and various satellite locations. The center also offers programs for in-service personnel in fulfillment of annual mandatory continuing education requirements and nonmandatory courses such as Basic and Advanced Accident Investigation, Perceptual Driving, and Instructor Development. Lethal Weapons Training, Act 235, provides the basic requirements and mandatory recertification for armed security personnel.

Culinary Arts Certificate

Website: <https://www.iup.edu/culinary/programs/culinary-arts>

The Department of Culinary Arts also offers a 16-month, non-credit Certificate in Culinary Arts. This program is accredited by the American Culinary Federation.

Cultural Competencies Certificate

The Cultural Competencies Certificate prepares you for life and professional practice in culturally diverse settings. The world is now global and the Cultural Competencies Certificate assists you in adopting a critical and self-reflective approach to differences in identity, as defined by, for example, race, ethnicity, gender, class, age, religion, ability, and sexual orientation. Since several of these identities are combined in any culture, the certificate allows you to select a series of courses that best meet your needs and careers. The certificate provides the knowledge, skills, and attitudes to increase your effectiveness in relating across cultural differences and in increasingly diverse environments in the country and abroad. The core courses establish the foundations needed to appreciate diversity and cultural competency, while the electives allow you to explore the facets of diversity that will best prepare you for life in your global workplace.

Core Courses: 3

- ANTH 110 - Contemporary Anthropology **Credits: 3**
or
- ANTH 211 - Cultural Anthropology **Credits: 3**

One Culture Area Course: 3

- ANTH 271 - Cultural Area Studies: Africa **Credits: 3**
- ANTH 272 - Culture Area: China **Credits: 3**
- ANTH 274 - Cultural Area Studies: Latin America **Credits: 3**
- ANTH 314 - Contemporary Native American Cultures **Credits: 3**
- ANTH 370 - Latinos and Diasporas **Credits: 3**

Electives: 6

- ANTH 213 - World Archaeology **Credits: 3**
- ANTH 240 - Introduction to Global Health **Credits: 3**
- ANTH 316 - Anthropology of Religion **Credits: 3**
- ANTH 350 - Anthropology of Gender **Credits: 3**
- ANTH 352 - The Anthropology of Human Rights **Credits: 3**
- ANTH 420 - Environmental Anthropology **Credits: 3**
- ANTH 444 - Medical Anthropology **Credits: 3**

- ANTH 450 - Health Disparities **Credits: 3**
or
- SOC 450 - Health Disparities **Credits: 3**

- ASIA 200 - Introduction to Asian Studies **Credits: 3**
- BCOM 342 - Intercultural Business Communication **Credits: 3**
- COMM 230 - Global Media and Communication **Credits: 3**
- CRIM 410 - Race, Ethnicity, Social Structure, and Crime **Credits: 3**
- ECON 338 - Poverty in Africa **Credits: 3**
- EDUC 499 - Multicultural/Multiethnic Education **Credits: 2**
- ENGL 336 - Language, Gender, and Society **Credits: 3**
- ENGL 344 - Ethnic American Literature **Credits: 3**
- ENGL 348 - African American Literature **Credits: 3**
- ENGL 350 - Gender and Sexual Orientation in Literature, Theory, and Film **Credits: 3**
- FDNT 470 - Human Food Consumption Patterns **Credits: 3**
- GEOG 104 - World Geography: Global Context **Credits: 3**
- GEOG 230 - Cultural Geography **Credits: 3**
- HIST 331 - Modern Middle East **Credits: 3**
- HIST 338 - The History of Iran **Credits: 3**
- HIST 365 - History of Black America since Emancipation **Credits: 3**
- HIST 369 - Women in America **Credits: 3**
- HIST 434 - Modern China 1800-present **Credits: 3**
- HIST 437 - Modern Japan 1850-Present **Credits: 3**
- JRNL 375 - World News Coverage **Credits: 3**

- LAS 481 - Special Topics in Latin American Studies **Credits: 1-3**

- LAS 350 - The Mayas: Culture, Literature, and Numbers **Credits: 3**
- LAS 480 - Latin American Studies Seminar **Credits: 3**

- LGBT 200 - Introduction to Lesbian, Gay, Bisexual, Transgender, and Queer Studies **Credits: 3**
- LGBT 400 - Queer Theory **Credits: 3**
- MGMT 350 - International Business **Credits: 3**
or
- MKTG 350 - International Business **Credits: 3**
- NURS 410 - Health Promotion and Social Issues **Credits: 3**
- PNAF 131 - Introduction to Pan-African Studies **Credits: 3**
- RLST 110 - World Religions **Credits: 3**
- RLST 245 - Women and Religion **Credits: 3**
- RLST 360 - African Religions **Credits: 3**
- RLST 365 - Native North American Religions **Credits: 3**
- RLST 370 - Religions: China and Japan **Credits: 3**
- RLST 374 - Buddhism **Credits: 3**
- RLST 375 - Religions of India **Credits: 3**
- RLST 378 - Hinduism **Credits: 3**
- RLST 380 - Islam **Credits: 3**
- RLST 385 - Christianity **Credits: 3**
- RLST 402 - Topics in Asian Religions **Credits: 3**
- RLST 403 - Topics in Indigenous Religions **Credits: 3**
- SOC 314 - Sociology of Native Americans **Credits: 3**
- SOC 361 - Social Stratification **Credits: 3**
- SOC 362 - Racial and Ethnic Minorities **Credits: 3**
- SOC 363 - Sociology of Gender **Credits: 3**
- SOC 417 - Global Service Learning **Credits: 3**
- SOC 452 - Disability and Society **Credits: 3**
- SPAN 244 - Modern Mexico **Credits: 3**
- SPAN 342 - Spanish Cultures from the 19th Century to the Present **Credits: 3**
- SPAN 344 - Spanish-American Cultures from the 19th Century to the Present **Credits: 3**
- WGS 200 - Introduction to Women's and Gender Studies **Credits: 3**
- WGS 301 - Asian American and Asian Diasporic Women's Literature **Credits: 3**
- WGS 400 - Feminist Theories **Credits: 3**

Total Certificate Requirements: 12

Digital History Certificate

Introduces skills that will prepare students to research, discover, preserve, and present history through digital and news media. Completion of the 18-credit certificate will enable students to pursue careers in education, virtual archive management, public history, and multimedia productions.

Core Courses: 9

- One History course numbered 250 or below 3cr
- One History course numbered 300 or above 3cr
- HIST 379 - History in the Digital Age **Credits: 3**

Choose any three:

- COMM 240 - Communications Graphics **Credits: 3**
- COMM 249 - Basic Audio Recording Techniques **Credits: 3**
- COMM 271 - Beginning Photography **Credits: 3**
- COMM 306 - 2-D Digital Game Development **Credits: 3**

- COMM 374 - Documentary Photography **Credits:** 3
- COMM 440 - Multimedia Production **Credits:** 3
- COMM 449 - Advanced Audio Recording Techniques **Credits:** 3

Total Certificate Requirements: 18

Driver Education Certification

Candidates for the driver education certification must possess, or be a candidate for, a valid Pennsylvania certificate in any area of certification. A student must currently complete the following four courses: KHSS 251, KHSS 252, KHSS 353, and KHSS 354. Students must request the certificate in driver education when they apply for graduation. For students who have already graduated, contact the Office of the Dean, College of Education and Communications, for correct procedures.

Required Courses:

The four courses are offered that prepare students for the teaching driver education in both public and private settings, and also prepares students to take the Pennsylvania Department of Education certification exam (Pennsylvania Safety Driver Education Teacher Certification Assessment). A valid driver's license is required to take KHSS 252 and KHSS 354.

- KHSS 251 - Foundations of Safety and Emergency Health Care **Credits:** 3 (1)
- KHSS 252 - Introduction to the Driving Task **Credits:** 3
- KHSS 353 - Driver Education Program Management **Credits:** 3
- KHSS 354 - Application of Driver Education Instructional Modes **Credits:** 3

Total Certificate Requirements: 12

(1) KHSS 251 may be substituted for KHSS 242 in the core curriculum.

Dual Certification Special Education Grades 7-12 for Secondary Education Majors

Students majoring in a secondary education field may complete academic requirements for certification in special education grades 7-12 by completing the following requirements. Students are advised that completion of requirements for a second certification may take up to three additional semesters.

Required Courses: 30

- EDEX 111 - Introduction to Exceptional Persons **Credits:** 3
- EDEX 221 - Methods of Teaching Mathematics to Secondary Students with Disabilities **Credits:** 2
- EDEX 340 - Introduction to Behavior Management in Special Education **Credits:** 3
- EDEX 435 - Methods and Curriculum—Severe Cognitive Disabilities **Credits:** 3
- EDEX 440 - Ethical and Professional Behavior **Credits:** 1
- EDEX 458 - Transition Assessment and Planning for Youth with Disabilities **Credits:** 3
- EDEX 469 - Education of Persons with Emotional/Behavioral Disorders, Learning Disabilities or Brain Injury **Credits:** 3
- EDEX 478 - Education of Persons with Mental Retardation/Developmental Disabilities and Physical/ Multiple Disabilities **Credits:** 3
- EDUC 342 - Pre-student Teaching Clinical Experience II **Credits:** 1 (1)
- EDUC 421 - Student Teaching **Credits:** 5-6 (2)

Total Certificate Requirements: 30

(1) EDUC 342 could be taken in summer. Arrangements could be made to use ESY programs such as IUP, PACE, Sunrise School, Milestones, and/or a number of other programs near and far. In fact, a lot of this program could be easily integrated into the candidate's major program.

(2) A six-week placement under the supervision of a certified special education teacher. Arrangements for this experience will be made among the student-teaching coordinators of the student's major, special education, and the Teacher Education office.

Emergency Medical Technician Certificate, Center for Emergency Services Training

Website: <https://www.iup.edu/est/emt-training/>

Emergency Medical Technician (EMT) is a non-degree certificate program offered through the IUP Institute for Rural Health and Safety provides the necessary coursework to apply for the National Registry and Pennsylvania EMT certification or licensure, Issued by National Registry and Pennsylvania Department of Health. Certification or licensure is valid for 3 years.

The Emergency Medical Technician (EMT) program will primarily be designed for future emergency medical service personnel but is appropriate for anyone who may respond to emergencies, including fire/rescue personnel, nurses, coaches, athletic trainers, and safety professionals. Participants who successfully complete this program are eligible to take National Registry of EMT certification exams for both Pennsylvania certification and national certification as an EMT. The EMT program does have an articulation agreement for credit transfer, but only in the Kinesiology, Health and Sport Science Program. Other departments could embed EMT into their programs, for example: Athletic Training, Biology Pre-Med, Public Health, Natural Science Pre-Physical Therapy and Physician's Assistant.

The EMT program is accredited by Pennsylvania Department of Health. This pursuant to the Emergency Medical Services System, Act of August 18, 2009, P.L. 308, No. 37 as amended, and as set forth in the rules and regulations. The Pennsylvania Department of Health hereby issues this certificate of accreditation to conduct education programs for prehospital personnel in the Commonwealth of Pennsylvania.

- Accreditation Number: 0068110165
- Types of Training Programs: BLS and ALS
- Date of Issue: 11/28/2018
- Expiration: 12/31/2021
- Region: EMS West

Admission to the EMT program requires a HS Diploma/GED, approval of the Director of Emergency Services Training, and various clearances.

The 152-hour (pass/fail) program may be offered at IUP's Indiana campus, and the West Pike Institute for Rural Health and Safety or Monroeville sites. Successful completion requires students to pass all modular exams and the final exam with 70% or greater, have a minimum of 10 patient contacts in the clinical/field, and graded as competent in the cognitive, affective and psychomotor domains.

Students will receive a certificate upon passing the program. A course representing the EMT program will appear on the student's IUP clock hour transcript which will serve as official confirmation of completion.

More details outlining the program's curriculum, fees, and required clearances are outlined on the IUP Institute for Rural Health and Safety webpage.

English as a Second Language Certificate

Prepares students to teach English as a second or other language through a focus on structures and uses of English, the role of sociocultural contexts in language learning, second language acquisition theory, and practices and materials for use in the ESL classroom. Completing the 12-credit program will enable students from multiple majors to pursue teaching English in a variety of domestic and international contexts. Teacher candidates seeking ESL state certification take an additional three credit field experience course during which they are placed in a P-12 ESL classroom.

Required Courses:

- ENGL 415 - English Language Studies for Teachers **Credits: 3**
- ENGL 424 - Second Language Acquisition **Credits: 3**
- ENGL 426 - ESL Methods and Materials **Credits: 3**
- ENGL 442 - Cross-Cultural Communication **Credits: 3**

The above courses may be offered as DE courses or face to face.

For Teacher Candidates:

If students are majoring in an education program that leads to certification, they must add ENGL 493 in order to apply for ESL certification from the state of Pennsylvania. ENGL 493 is only offered as a face to face course.

- ENGL 493 - Internship **Credits: 3-12 (3 credits needed)**
(1)

Total Certificate Requirements: 12-15

(1) The field experience, ENGL 493, requires 60 hours of direct work with English Language Learners (ELLs), a minimum of 30 hours of which must be in an approved public school classroom setting. Students sign up for ENGL 493 in fall. A minimum of 30 hours in the classroom must be completed in the fall. The remaining 30 hours (if the full 60 are not completed in the classroom in fall) may be continued into spring. The remaining 30 hours could be completed in a variety of approved settings, including after-school clubs that provide ESL tutoring and other community locations that offer services to ELLs.

Fifth Year Courses Reading Specialist

To receive a reading specialist certification, students must complete 27 credits within the master's program from categories A-C.

A. Literacy

- LTCY 600 - Foundations of Literacy Instruction **Credits: 3**
- LTCY 644 - Issues and Trends in the Language Arts **Credits: 3**
- LTCY 701 - Assessment and Acceleration **Credits: 3**
- LTCY 702 - Reading and Writing in the Content Areas **Credits: 3**
- LTCY 705 - Organization and Administration of Reading/ Writing Programs **Credits: 3**
- LTCY 770 - Practicum and Seminar for Reading Specialist I **Credits: 3**
- LTCY 771 - Practicum and Seminar for Reading Specialist II **Credits: 3**

B. Diversity

- LTCY 635 - Literacy in Inclusive Classrooms **Credits: 3**

C. Related Area

- LTCY 607 - Instruction and Learning with Literature **Credits: 3**

Total Certificate Requirements: 27

Please see the *Graduate Catalog* at www.iup.edu/graduatestudies/catalog and look under Master's Degree Programs for specific courses.

Foreign Language/Chinese Certificate

The Foreign Language Certificate is an 18-credit program aimed at those who want to add a foreign language credential to their main academic preparation, either as a bachelor's degree in progress or in a postbaccalaureate setting. The certificate is an excellent opportunity for students in any college of the university, particularly those in colleges where foreign language study is not generally required, such as the Eberly College of Business and Information Technology and the College of Health and Human Services.

This certificate offers students a variety of options for fulfilling the requirements. In addition to completing the course sequence, students may earn credits toward the certificate by taking an Advanced Placement Exam, or they may earn ACE credits. Students with previous foreign language experience who do not earn credits through Advanced Placement or ACE are required to take a departmentally-approved language placement exam for possible exemption from some courses. Students are allowed to exempt out of up to 12 credits of the initial language sequence either by exam or through transfer credits from another institution. All students, including returning, graduate, and transfer students, are required to take at least six credits at IUP from Foreign Language levels 220 and above.

Initial Language Sequence 12cr

- CHIN 101 - Elementary Chinese I **Credits: 4**
- CHIN 102 - Elementary Chinese II **Credits: 4**
- CHIN 201 - Intermediate Chinese **Credits: 4**

Intermediate Language Sequence: 6

Students must complete 6 credits above the 201 level in course work related to Chinese language or culture. The 6 additional credits must be approved by the Department of Foreign Languages chair or the chair's designee.

Courses taken in a study abroad context may also count toward the certificate. Transfer credit received through study abroad experiences must be approved by chair of the Department of Foreign Languages or the chair's designee or previously approved through the Admissions–Transfer Services Office.

Oral Proficiency Interview Exam

By the midterm of the final semester of course work for the certificate, students will be required to complete the Oral Proficiency Interview (OPI) or the Oral Proficiency Interview by Computer (OPIC), administered by Language Testing International (LTI). The OPI and OPIC provide an independent rating of the student's oral skills in the language, which may be useful for employment purposes. There is a fee for the OPI and the OPIC, for which students will be responsible.

Total Certificate Requirements: 18

Foreign Language/French Certificate

The Foreign Language Certificate is an 18-credit program aimed at those who want to add a foreign language credential to their main academic preparation, either as a bachelor's degree in progress or in a postbaccalaureate setting. The certificate is an excellent opportunity for students in any college of the university, particularly those in colleges where foreign language study is not generally required, such as the Eberly College of Business and Information Technology and the College of Health and Human Services.

This certificate offers students a variety of options for fulfilling the requirements. In addition to completing the course sequence, students may earn credits toward the certificate by taking an Advanced Placement Exam, or they may earn ACE credits. Students with previous foreign language experience who do not earn credits through Advanced Placement or ACE are required to take a departmentally-approved language placement exam for possible exemption from some courses. Students are allowed to exempt out of up to 12 credits of the initial language sequence either by exam or through transfer credits from another institution. All students, including returning, graduate, and transfer students, are required to take at least six credits at IUP from Foreign Language levels 220 and above.

Initial Language Sequence 12cr

- FRNC 101 - Basic French I **Credits: 4**

- FRNC 102 - Basic French II **Credits:** 4
- FRNC 201 - Intermediate French **Credits:** 4

Intermediate Language Sequence: 6

Students must complete FRNC 220 and 3 additional credits above the 201 level. The 3 additional credits may be either FRNC 230 or another course related to French, which must be approved by the Department of Foreign Languages chair or the chair's designee.

Courses taken in a study abroad context may also count toward the certificate. Transfer credit received through study abroad experiences must be approved by chair of the Department of Foreign Languages or the chair's designee or previously approved through the Admissions–Transfer Services Office.

Oral Proficiency Interview Exam

By the midterm of the final semester of course work for the certificate, students will be required to complete the Oral Proficiency Interview (OPI) or the Oral Proficiency Interview by Computer (OPIc), administered by Language Testing International (LTI). The OPI and OPIc provide an independent rating of the student's oral skills in the language, which may be useful for employment purposes. There is a fee for the OPI and the OPIc, for which students will be responsible.

Total Certificate Requirements: 18

Foreign Language/German Certificate

The Foreign Language Certificate is an 18-credit program aimed at those who want to add a foreign language credential to their main academic preparation, either as a bachelor's degree in progress or in a postbaccalaureate setting. The certificate is an excellent opportunity for students in any college of the university, particularly those in colleges where foreign language study is not generally required, such as the Eberly College of Business and Information Technology and the College of Health and Human Services.

This certificate offers students a variety of options for fulfilling the requirements. In addition to completing the course sequence, students may earn credits toward the certificate by taking an Advanced Placement Exam, or they may earn ACE credits. Students with previous foreign language experience who do not earn credits through Advanced Placement or ACE are required to take a departmentally-approved language placement exam for possible exemption from some courses. Students are allowed to exempt out of up to 12 credits of the initial language sequence either by exam or through transfer credits from another institution. All students, including returning, graduate, and transfer students, are required to take at least six credits at IUP from Foreign Language levels 220 and above.

Initial Language Sequence 12cr

- GRMN 101 - Elementary German I **Credits:** 4
- GRMN 102 - Elementary German II **Credits:** 4
- GRMN 201 - Intermediate German **Credits:** 4

Intermediate Language Sequence: 6

Students must complete GRMN 220 and 3 additional credits above the 201 level. The 3 additional credits may be either GRMN 230 or another course related to German, which must be approved by the Department of Foreign Languages chair or the chair's designee.

Courses taken in a study abroad context may also count toward the certificate. Transfer credit received through study abroad experiences must be approved by chair of the Department of Foreign Languages or the chair's designee or previously approved through the Admissions–Transfer Services Office.

Oral Proficiency Interview Exam

By the midterm of the final semester of course work for the certificate, students will be required to complete the Oral Proficiency Interview (OPI) or the Oral Proficiency Interview by Computer (OPIC), administered by Language Testing International (LTI). The OPI and OPIC provide an independent rating of the student's oral skills in the language, which may be useful for employment purposes. There is a fee for the OPI and the OPIC, for which students will be responsible.

Total Certificate Requirements: 18

Foreign Language/Japanese Certificate

The Foreign Language Certificate is an 18-credit program aimed at those who want to add a foreign language credential to their main academic preparation, either as a bachelor's degree in progress or in a postbaccalaureate setting. The certificate is an excellent opportunity for students in any college of the university, particularly those in colleges where foreign language study is not generally required, such as the Eberly College of Business and Information Technology and the College of Health and Human Services.

This certificate offers students a variety of options for fulfilling the requirements. In addition to completing the course sequence, students may earn credits toward the certificate by taking an Advanced Placement Exam, or they may earn ACE credits. Students with previous foreign language experience who do not earn credits through Advanced Placement or ACE are required to take a departmentally-approved language placement exam for possible exemption from some courses. Students are allowed to exempt out of up to 12 credits of the initial language sequence either by exam or through transfer credits from another institution. All students, including returning, graduate, and transfer students, are required to take at least six credits at IUP from Foreign Language levels 220 and above.

Initial Language Sequence 12cr

- JAPN 101 - Elementary Japanese I **Credits: 4**
- JAPN 102 - Elementary Japanese II **Credits: 4**
- JAPN 201 - Intermediate Japanese **Credits: 4**

Intermediate Language Sequence: 6

Students must complete 6 credits above the 201 level in course work related to Japanese language or culture. The 6 additional credits must be approved by the Department of Foreign Languages chair or the chair's designee.

Courses taken in a study abroad context may also count toward the certificate. Transfer credit received through study abroad experiences must be approved by chair of the Department of Foreign Languages or the chair's designee or previously approved through the Admissions–Transfer Services Office.

Oral Proficiency Interview Exam

By the midterm of the final semester of course work for the certificate, students will be required to complete the Oral Proficiency Interview (OPI) or the Oral Proficiency Interview by Computer (OPIC), administered by Language Testing International (LTI). The OPI and OPIC provide an independent rating of the student's oral skills in the language, which may be useful for employment purposes. There is a fee for the OPI and the OPIC, for which students will be responsible.

Total Certificate Requirements: 18

Foreign Language/Spanish Certificate

The Foreign Language Certificate is an 18-credit program aimed at those who want to add a foreign language credential to their main academic preparation, either as a bachelor's degree in progress or in a postbaccalaureate setting. The certificate is an excellent opportunity for students in any college of the university, particularly those in colleges where foreign language study is not generally required, such as the Eberly College of Business and Information Technology and the College of Health and Human Services.

This certificate offers students a variety of options for fulfilling the requirements. In addition to completing the course sequence, students may earn credits toward the certificate by taking an Advanced Placement Exam, or they may earn ACE credits. Students with previous foreign language experience who do not earn credits through Advanced Placement or ACE are required to take a departmentally-approved language placement exam for possible exemption from some courses. Students are allowed to exempt out of up to 12 credits of the initial language sequence either by exam or through transfer credits from another institution. All students, including returning, graduate, and transfer students, are required to take at least six credits at IUP from Foreign Language levels 220 and above.

Initial Language Sequence 12cr

- SPAN 101 - Elementary Spanish I **Credits: 4**
- SPAN 102 - Elementary Spanish II **Credits: 4**
- SPAN 201 - Intermediate Spanish **Credits: 4**

Intermediate Language Sequence: 6

Students must complete SPAN 220 and 3 additional credits above the 201 level. The 3 additional credits may be either SPAN 230 or another course related to Spanish, which must be approved by the Department of Foreign Languages chair or the chair's designee.

Courses taken in a study abroad context may also count toward the certificate. Transfer credit received through study abroad experiences must be approved by chair of the Department of Foreign Languages or the chair's designee or previously approved through the Admissions–Transfer Services Office.

Oral Proficiency Interview Exam

By the midterm of the final semester of course work for the certificate, students will be required to complete the Oral Proficiency Interview (OPI) or the Oral Proficiency Interview by Computer (OPIc), administered by Language Testing International (LTI). The OPI and OPIc provide an independent rating of the student's oral skills in the language, which may be useful for employment purposes. There is a fee for the OPI and the OPIc, for which students will be responsible.

Total Certificate Requirements: 18

Geospatial Intelligence Certificate

This certificate prepares students to undertake the use and analysis of imagery, imagery intelligence, and geospatial information to describe, assess, and visually depict physical features and geographically-referenced activities on the Earth's surface for intelligence purposes. Students will learn the context, geographic information science, and geo intelligence tradecraft techniques to be well prepared to enter the workforce as an entry-level geospatial intelligence analyst for federal intelligence agencies or private intelligence contractors.

Required Courses: 21

- GEOG 213 - Cartography and Map Design **Credits: 3**
or
- RGPL 213 - Cartography and Map Design **Credits: 3**
- GEOG 316 - Introduction to Geographic Information Systems **Credits: 3**
or
- RGPL 316 - Introduction to Geographic Information Systems **Credits: 3**
- GEOG 415 - Introduction to Remote Sensing **Credits: 3**
or
- RGPL 415 - Introduction to Remote Sensing **Credits: 3**

- GEOG 424 - Technical Issues in Geographic Information Systems **Credits: 3**
or
- RGPL 424 - Technical Issues in Geographic Information Systems **Credits: 3**
- GEOG 455 - Advanced Remote Sensing **Credits: 3**
or
- RGPL 455 - Advanced Remote Sensing **Credits: 3**
- GEOG 488 - Geospatial Intelligence Capstone **Credits: 3**

MLSC 201

or

- PLSC 465 - Intelligence Process and Policy **Credits: 3**

Total Certificate Requirements: 21

Japan Studies Certificate

(1, 2, 3, 4)

The Japan Studies Certificate is a 15-credit program that allows students to pursue studies that focus on one or more disciplinary areas focused on Japan. Students who wish to pursue graduate-level studies and/or a career in a Japan-related field may want to add this credential to their main academic preparation. Others who have an interest in Japanese society and culture can also benefit from this certificate.

Core Courses: Primarily Japan-Focused Courses: 12-15

(2)

- ARHI 423 - Art of Japan **Credits: 3**
- ARHI 427 - Japanese Narrative Art **Credits: 3**
- HIST 436 - Japan 1500-1850: Early Modern Japan **Credits: 3**
- HIST 437 - Modern Japan 1850-Present **Credits: 3**
- JAPN - Japanese Language Courses **Credits: 4 (5)**
- RLST 374 - Buddhism **Credits: 3**

Electives: East Asia-Focused Courses: 0-3

- HIST 106 - Samurai and Gongfu Heroes: Masculinity in East Asia **Credits: 3**
or
- ASIA 106 - Samurai and Gongfu Heroes: Masculinity in East Asia **Credits: 3**
- HIST 206 - The History of East Asia **Credits: 3**
- PLSC 383 - Political Systems: Asia **Credits: 3**
- RLST 311 - Eastern Philosophy **Credits: 3**
- RLST 370 - Religions: China and Japan **Credits: 3**

Total Certificate Requirements: 15

(1) Courses need to be in at least two different prefixes.

(2) The subject matter varies in rotating topic courses (e.g., HIST 497, RLST 485 etc.); and special topics courses (i.e. classes numbered 281 and 481). When concerned with Asian Studies, these courses may be applied to either the Japan-focused or East Asia-focused categories with the approval of the Asian Studies Coordinator.

- (3) Three credits of an appropriate internship can count towards the certificate with the approval of the Asian Studies Coordinator.
- (4) No more than 6 transfer credits may be counted towards the certificate.
- (5) No more than 3cr from an appropriate language class may be counted toward the certificate.

Living Learning/Global Scholarship Certificate

The goal of this certificate is to provide students with enhanced sociohumanistic analysis and communication skills. The certificate is completed in the first four semesters providing students an advantage in obtaining internships as part of their undergraduate experience as well as enhanced future employability. Among the proficiencies that the students will develop are:

- 1) demonstration of effective oral communication skills
- 2) analysis and evaluation of cultural data and scholarly sources
- 3) interpretation of sources to structure an effective argument
- 4) synthesis and evaluation of a series of arguments into comprehensive written and oral presentations
- 5) effective communication of socio-humanistic knowledge base to a diverse audience.

Hands-on co-curricular activities will reinforce students' proficiencies including opportunities for mentorship to grow and apply their skills in their chosen field of study.

Includes designated coursework that integrates core principles of analysis and communication over the first four semesters. Participation involves coursework and an on-campus residency requirement for 4 consecutive semesters. Most students can complete the certificate within the framework of their 120-credit degree requirements.

Core Curricular: 4

- (1)
 - ANTH 211 - Cultural Anthropology **Credits: 3**
 - ENGL 202 - Composition II **Credits: 3**
 - HIST 198 - Explorations in Global History **Credits: 3**
 - JRNL 361 - Presentation Making **Credits: 3**

Co-Curricular Lab: 2

- (2)
 - LLRN 100 - Cocurricular Activity Lab **Credits: 0.5**
 - LLRN 200 - Cocurricular Activity Lab **Credits: 0.5**

Total Certificate Requirements: 14

- (1) Students will take core certificate courses as a cohort, one course each semester. Cohort sections of each course will be identified for students to register. Typical cohort sequence: Fall year one ANTH 211; Spring year one HIST 198; Fall year two JRNL 361; Spring year two ENGL 202 .
- (2) Students will take LLRN 100 (0.5cr) once each semester in the first year and LLRN 200 (0.5cr) once each semester in the second year.

Living Learning/Scientific Communication Certificate

The goal of this certificate is to provide students with enhanced Scientific analysis and communication skills. The certificate is completed in the first four semesters providing students an advantage in obtaining internships and external research opportunities as part of their undergraduate experience as well as enhanced future employability. Among the proficiencies that the students will develop are:

- 1) demonstration of effective oral communication skills in a scientific setting
- 2) analysis and evaluation of scientific arguments for scientific validity
- 3) interpretation of scientific data to structure an effective argument
- 4) synthesis and evaluation of a series of arguments into a comprehensive written and oral presentation
- 5) effective communication of scientific knowledge-base to a general and diverse audience. Hands-on co-curricular activities will reinforce students' proficiencies including opportunities for mentorship to grow and apply their skills in their chosen field of study.

Enrolled students will participate in a living-learning community while earning their certificate as a cohort. Includes designated coursework that integrates core principles of scientific communication over the first four semesters. Participation involves coursework and an on-campus residency requirement for 4 consecutive semesters. Most students can complete the certificate within the framework of their 120-credit degree requirements.

Core Lab Science: 4

(1)

- BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**
or
- BIOL 201 - Principles of Ecology and Evolution **Credits: 4**

- CHEM 111 - General Chemistry I **Credits: 4**
or
- CHEM 113 - Advanced General Chemistry I **Credits: 4**

- GEOS 201 - Foundations of Geology **Credits: 4**

Core Philosophy: 3

(1)

- PHIL 101 - Critical Thinking **Credits: 3**
or
- PHIL 221 - Symbolic Logic I **Credits: 3**

Core Math: 3

(1, 2)

- MATH 217 - Probability and Statistics **Credits: 3**

Capstone Course: 3

(1)

- ENGL 202 - Composition II **Credits: 3**
or
- COMM 261 - Teamwork and Communication Skills for College and Career **Credits: 3**

Co-Curricular Lab: 2

(3)

- LLRN 100 - Cocurricular Activity Lab **Credits: 0.5**
- LLRN 200 - Cocurricular Activity Lab **Credits: 0.5**

Total Minor Requirements: 15

(1) Students will take core certificate courses as a Living-Learning cohort, one course each semester. Cohort sections of each course will be identified for students to register. Typical cohort sequence: Fall year one Core Lab Science; Spring year one Core Philosophy; Fall year two Core Math; Spring year two Capstone Course. The specific course in each course area will be specified one year before the start of each certificate program to coincide with freshmen recruitment.

(2) MATH 216 is interchangeable for MATH 217 .

(3) Students will take LLRN 100 (0.5cr) once each semester in the first year and LLRN 200 (0.5cr) once each semester in the second year.

Middle Eastern Studies Certificate

(1, 2, 3, 4)

The Middle Eastern Studies Certificate is a 15-credit program that allows students to pursue studies that focus on one or more disciplinary areas focused on the Middle East. Students who wish to pursue graduate-level studies and/or a career in a Middle Eastern-related field may want to add this credential to their main academic preparation. Others who have an interest in Middle Eastern society and culture can also benefit from this certificate.

Required Courses: 15

(2)

- HIST 207 - The History of the Middle East **Credits: 3**
 - HIST 331 - Modern Middle East **Credits: 3**
 - HIST 338 - The History of Iran **Credits: 3**
 - HIST 339 - Jihad and the Origins of Islamist Movements in the Middle East **Credits: 3**
- or
- PLSC 339 - Jihad and the Origins of Islamist Movements in the Middle East **Credits: 3**
 - PLSC 384 - Political Systems: Middle East **Credits: 3**
 - RLST 380 - Islam **Credits: 3**

Total Certificate Requirements: 15

(1) Courses need to be in at least two different prefixes.

(2) The subject matter varies in rotating topic courses (e.g., HIST 497, RLST 485 etc.); and special topics courses (i.e. classes numbered 281 and 481). When concerned with the Middle East, these courses can count towards the certificate with the approval of the Asian Studies Coordinator.

(3) Three credits of an appropriate internship can count towards the certificate with the approval of the Asian Studies Coordinator.

(4) No more than 6 transfer credits may be counted towards the certificate.

(5) No more than 3cr from an appropriate language class may be counted towards the certificate.

Military Geographic Competencies Certificate

The goal of this certificate program is to provide students who are pursuing military science degree programs with geographic knowledge and geospatial expertise relevant to service in the armed forces. Among the proficiencies that students will develop are knowledge of global human and physical geography, global regional geographic characteristics, and cartographic and geospatial techniques.

Core Courses: 9

- GEOG 104 - World Geography: Global Context **Credits: 3**

or

- RGPL 103 - Global Cities: Planning and Development **Credits: 3**
- GEOG 105 - Our Digital Earth: Mobile Devices, Web Applications, and Geospatial Technology **Credits: 3**
- GEOG 213 - Cartography and Map Design **Credits: 3**

Controlled Electives: 6

One additional course from the following:

- GEOG 254 - Geography of Russia, Central Eurasia, and Eastern Europe **Credits: 3**
- GEOG 255 - Geography of Africa **Credits: 3**
- GEOG 257 - Geography of South and Southwest Asia **Credits: 3**

One additional course from the following:

- GEOG 316 - Introduction to Geographic Information Systems **Credits: 3**
- GEOG 415 - Introduction to Remote Sensing **Credits: 3**
- GEOG 425 - Global Positioning Systems (GPS) Concepts and Techniques **Credits: 3**

Total Certificate Requirements: 15

Museum Studies Certificate

The certificate in Museum Studies introduces students to the broad range of work found in museum settings. It prepares students for museum work by directly engaging them in museum-based internships and through multi-disciplinary coursework in a wide variety of museum types and practices. The certificate also prepares students for graduate work in Museum Studies. Students will learn display and presentational practices, cataloging techniques, and the basics of artifact and artwork conservation.

Required Courses: 12

- ANTH 318 - Museum Methods **Credits: 3**
- ARHI 420 - Art Museums, Art Libraries, and Visual Resources **Credits: 3**
- HIST 420 - Introduction to Public History **Credits: 3**

Museum-based Internship

- ANTH 493 - Internship in Anthropology **Credits: 3-12**
or
- ARHI 493 - Internship **Credits: 3-12**
or
- HIST 493 - Internship **Credits: 3-12**

Choose one from the following: 3

- ANTH 486 - Historic Artifacts **Credits: 3**
- ANTH 489 - Prehistoric Technologies of Eastern North America **Credits: 3**
- ARED 323 - Community-Based and Museum Art Education **Credits: 3**
- HIST 421 - Archival Studies **Credits: 3**
- HIST 422 - History Museums and Historic Sites: Theory and Practice **Credits: 3**

Total Certificate Requirements: 15

Paramedic Certificate, Center for Emergency Services Training

The Center for Emergency Services Training offers programs designed to meet the training needs of ambulance, fire, and police personnel in the areas of emergency medical services and rescue. Projects include emergency services training for first responders through a federal Health Resources and Services Administration grant to reduce incidences of morbidity and mortality related to opioid usage in rural areas, and for employees in industrial settings like power plants and coal mines. Two certifications available are Emergency Medical Technician and Paramedic.

The **Paramedic** 1,150-clock-hour program with 600 hours in the classroom, including 230 hours of interactive lecture and 370 lab hours. Also, a minimum of 550 hours are required in clinical and field settings, with a minimum of 250 hours at clinical sites, and a minimum of 100 hours during the Summative Capstone Field Internship. Up to 30 transfer credits may be awarded to students with Paramedic certification.

Photography and Digital Imaging Certificate

For students who wish to obtain inclusive training in digital photography, image optimization, and display. This 18-credit program certificate requires students to take five 3-credit core courses and an additional 3 credits of electives. Completion of the certificate will help prepare students for positions in many fields in which knowledge of photography and digital imaging is required. Majors from other departments will be able to declare a communications media minor along with receiving the certificate.

Core Courses: 15

- COMM 101 - Introduction to Communications, Media, and Culture **Credits: 3**
- COMM 271 - Beginning Photography **Credits: 3**
- COMM 371 - Advanced Photography **Credits: 3**
- COMM 374 - Documentary Photography **Credits: 3**
- COMM 471 - Advanced Image Editing **Credits: 3**

Elective: 3

- COMM 240 - Communications Graphics **Credits: 3**
- COMM 251 - Television Production **Credits: 3**
- COMM 390 - Practicum in Communications **Credits: 1-3 (1)**
- COMM 408 - Media Field Studies **Credits: 3**
- COMM 440 - Multimedia Production **Credits: 3**
- COMM 474 - Commercial Photography **Credits: 3**
- COMM 477 - Freelancing and Entrepreneurship in Media **Credits: 3**
- COMM 481 - Special Topics **Credits: 1-3 (1)**

Total Certificate Requirements: 18

(1) As appropriate depending on topic: approval required.

Popular Music Studies Certificate

The Certificate in Popular Music Studies introduces students to fundamental concepts associated with the creation and reception of popular music. It is a credential that enables students to demonstrate basic competency with the performance, production, or analysis of popular music, and may be particularly appealing to those studying music, communications media, entrepreneurship, or marketing.

The certificate program is administered jointly by the Department of Music and Department of Communications Media. It requires 10 credits of core courses and an additional 9 credits of electives. While basic performance or songwriting ability is recommended, no audition is required for admission to the program.

Core Courses: 10

- COMM 249 - Basic Audio Recording Techniques **Credits: 3**
- COMM 414 - Music, Media, and Culture **Credits: 3**
- MUSC 114 - Analysis of Popular Music **Credits: 3**
- MUSC 140 - Popular Music Ensemble **Credits: 1 (2)**

Electives: 9

9 credits from the following:

- APMU ____ Applied Music **Credits: 1-2 (1)**
- COMM 354 - Media Law and Policy **Credits: 3**
- COMM 449 - Advanced Audio Recording Techniques **Credits: 3**
- MUHI 333 - History of Popular Music Since 1945 **Credits: 3**
- MUSC 140 - Popular Music Ensemble **Credits: 1 (2)**

Total Certificate Requirements: 19

(1) Applied music instructors may require certificate participants to demonstrate basic proficiency with voice or a musical instrument. Students may elect up to two semesters of 1cr lessons.

(2) Students must register for MUSC 140 - Popular Music Ensemble (1cr) at least once. The course may be repeated up to three times for a total of four credits.

Popular Music Studies Certificate

(1)

The Certificate in Popular Music Studies introduces students to fundamental concepts associated with the creation and reception of popular music. It is a credential that enables students to demonstrate basic competency with the performance, production, or analysis of popular music, and may be particularly appealing to those studying music, communications media, entrepreneurship, or marketing.

The certificate program is administered jointly by the Department of Music and Department of Communications Media. It requires 10 credits of core courses and an additional nine credits of electives. While basic performance or songwriting ability is recommended, no audition is required for admission to the program.

Core Courses: 10

- COMM 249 - Basic Audio Recording Techniques **Credits: 3**
- COMM 414 - Music, Media, and Culture **Credits: 3**
- MUSC 114 - Analysis of Popular Music **Credits: 3**
- MUSC 140 - Popular Music Ensemble **Credits: 1 (2)**

Electives: 9

Nine credits from the following:

- APMU XXX - Applied Music **Credits: 1-2 (1)**
- COMM 354 - Media Law and Policy **Credits: 3**
- COMM 449 - Advanced Audio Recording Techniques **Credits: 3**
- MUHI 333 - History of Popular Music Since 1945 **Credits: 3**
- MUSC 140 - Popular Music Ensemble **Credits: 1 (2)**

Total Certificate Requirements: 19

(1) Applied music instructors may require certificate participants to demonstrate basic proficiency with voice or a musical instrument. Students may elect up to two semesters of 1cr lessons.

(2) Students must register for MUSC 140 - Popular Music Ensemble (1cr) at least once. The course may be repeated up to three times for a total of four credits.

Public History Certificate

(1)

Prepares students for careers in the collection, preservation, and presentation of information about the past to the general public. This 18-credit certificate complements majors in related fields such as anthropology, communications media, and education. Completion of the certificate will prepare students to pursue positions in libraries, museums, archives, national parks, heritage sites, media, and corporations.

Core Courses: 6

- HIST 204 - United States History to 1877 **Credits: 3**
or
- HIST 205 - United States History since 1877 **Credits: 3**
- HIST 420 - Introduction to Public History **Credits: 3**

Controlled Electives: 6

Either:

Option 1

Choose two Public History courses from:

- HIST 421 - Archival Studies **Credits: 3**
- HIST 422 - History Museums and Historic Sites: Theory and Practice **Credits: 3**
- HIST 423 - Oral History Practice **Credits: 3**

Option 2

- A 3cr internship

Choose one Public History Course from:

- HIST 421 - Archival Studies **Credits: 3**
- HIST 422 - History Museums and Historic Sites: Theory and Practice **Credits: 3**
- HIST 423 - Oral History Practice **Credits: 3**

Electives: 6

- Two 300-level or higher History

Total Certificate Requirements: 18

(1) No Public History courses (HIST 420, HIST 421, HIST 422, or HIST 423) may be counted toward the BSEd—Social Studies Education/History Track. Only one may be counted toward the BA—History or the BA—History/Pre-law Track.

School Security Personnel Basic Training Program

Website: <https://www.iup.edu/crimjustice/>

IUP Criminal Justice Training Center specifically designed to satisfy the requirements for the PA Act 67 of 2019: School Safety and Security that extends for two years, followed by refreshers to stay current.

The School Security Personnel (SSP) Basic Training Program is a forty-hour (40) block of instruction designed for law enforcement officers and school safety professionals working in an educational environment with school administrators. The course provides tools for officers to build positive relationships with both students and staff. The course is also beneficial for educational professionals dedicated to providing a safe learning environment and provides a more in-depth understanding of the role and functions of a SSP.

Accreditation by the Pennsylvania Commission on Crime and Delinquency (PCCD) is pending, with the first cohort slated for June 2020.

Admission to the SSP program requires a HS Diploma/GED, approval of the Director of IUP's Criminal Justice Training Center, and various clearances.

The 40-hour (pass/fail) program may be offered in person or on-line over a period of 5-6 weeks throughout the year. Successful completion requires students to pass unit quizzes and deliver a culminating presentation. Students will receive a certificate upon passing the program. A course representing the SSP program will appear on the student's IUP clock hour transcript which will serve as official confirmation of completion.

More details outlining the program's curriculum, fees, and required clearances will be outlined on the IUP Criminal Justice web page.

Secondary School Cooperative Education Teacher/Coordinator Certification

(1)

Existing Pennsylvania teaching certificate (Vocational Instructional I or II certificate or Instructional I or II certificate)

Required Courses:

- VOED 402 - Special Topics in Vocational Pedagogical Preparation **Credits:** 1-15

Total Certification Requirements: 15

(1) Student may be exempt from some credit requirements based on proof of previous coursework.

Shale, Gas, and Energy Certificate

The certificate includes traditional academic specialties of geographic information systems, geology, and safety sciences, which provides a broad understanding of the industry from the perspective of geological development, geospatial data analysis, and safety and environmental regulations and compliance.

Required Geoscience Courses: 6

- GEOS 119 - Geology of Energy Resources **Credits:** 3 (1)
- GEOS 409 - Geology of Shale Gas—Field Workshop **Credits:** 3

Required Geography Courses: 6

- GEOG 109 - Geographic Information Science and Systems for Energy Applications **Credits:** 3 (1)
- GEOG 409 - Spatial Analysis Applications in the Energy Sectors Workshop **Credits:** 3

Required Safety Science Courses: 6

- SAFE 104 - Introduction to Safety in the Natural Gas Industry **Credits:** 3 (1)
- SAFE 204 - Principles of Safety in the Natural Gas Industry **Credits:** 3

Total Certificate Requirements: 18

(1) With departmental permission, one 100-level introductory course may be substituted by an appropriate upper-division course.

Shale, Gas, and Energy Certificate

Required Geoscience Courses: 6

- GEOS 119 - Geology of Energy Resources **Credits:** 3 (1)
- GEOS 409 - Geology of Shale Gas—Field Workshop **Credits:** 3

Required Geography Courses: 6

- GEOG 109 - Geographic Information Science and Systems for Energy Applications **Credits:** 3 (1)
- GEOG 409 - Spatial Analysis Applications in the Energy Sectors Workshop **Credits:** 3

Required Safety Science Courses: 6

- SAFE 104 - Introduction to Safety in the Natural Gas Industry **Credits:** 3 (1)
- SAFE 204 - Principles of Safety in the Natural Gas Industry **Credits:** 3

Total Certificate Requirements: 18

(1) With departmental permission, one 100-level introductory course may be substituted by an appropriate upper-division course.

Shale, Gas, and Energy Certificate

Required Geoscience Courses: 6

- GEOS 119 - Geology of Energy Resources **Credits:** 3 (1)
- GEOS 409 - Geology of Shale Gas—Field Workshop **Credits:** 3

Required Geography Courses: 6

- GEOG 109 - Geographic Information Science and Systems for Energy Applications **Credits:** 3 (1)
- GEOG 409 - Spatial Analysis Applications in the Energy Sectors Workshop **Credits:** 3

Required Safety Science Courses: 6

- SAFE 104 - Introduction to Safety in the Natural Gas Industry **Credits: 3** (1)
- SAFE 204 - Principles of Safety in the Natural Gas Industry **Credits: 3**

Total Certificate Requirements: 18

(1) With departmental permission, one 100-level introductory course may be substituted by an appropriate upper-division course.

Sociology for Human Services Certificate

The certificate in Sociology for Human Services seeks to provide students with sociological knowledge and skills that will help them pursue further education and careers in the field of human services. Human service practitioners rely on a broad base of knowledge and skills as they interact with diverse populations to prevent and remediate problems. This certificate provides the student with flexibility in selecting courses that best fit with the student's areas of interest and future goals while also providing core courses designed to familiarize students with the sociology of human services and enhance skills and preparation for work in these fields. The certificate in Sociology for Human Services is open to students in any major.

Core Courses: 6

- SOC 391 - Foundations of Sociological Practice **Credits: 3**
- SOC 392 - Clinical Sociological Practice **Credits: 3**

Social Stratification Elective: 3

One course from the following:

- SOC 361 - Social Stratification **Credits: 3**
- SOC 362 - Racial and Ethnic Minorities **Credits: 3**
- SOC 363 - Sociology of Gender **Credits: 3**
- SOC 452 - Disability and Society **Credits: 3**

Controlled Electives: 3

One course from the following:

- SOC 251 - Sociology of Human Sexuality **Credits: 3**
- SOC 333 - Delinquency and Youth **Credits: 3**
- SOC 357 - Sociology of Aging and the Life-course **Credits: 3**
- SOC 427 - Social Perspectives on Intimate Partner Violence **Credits: 3**
- SOC 428 - Child Abuse **Credits: 3**
- SOC 448 - Social Welfare Policy **Credits: 3**

Unmanned Aerial Systems (UAS) Science and Applications Certificate

This certificate provides students with foundational knowledge and technical skills in the emerging sector of small Unmanned Aerial Systems (UAS). Students will learn the regulatory environment for UASs in the United States, as well as the basics of UAS design and operation, aeronautics and flight theory, requirements for FAA Part 107 Remote Pilot certification, remote sensing and photogrammetric concepts, mission planning, UAS mission flight techniques, and processing techniques for data deliverables. The certificate is designed to

provide students with knowledge, skills, experience and credentials to participate in the expanding UAS sector as a certified FAA Part 107 Remote Pilot, operator, or ancillary ground crew member/observer.

Required Courses:

- GEOG 415 - Introduction to Remote Sensing **Credits: 3**
- GEOG 316 - Introduction to Geographic Information Systems **Credits: 3**
or
- GEOG 425 - Global Positioning Systems (GPS) Concepts and Techniques **Credits: 3**
- GEOG 460 - Foundations of Unmanned Aerial Systems Science and Applications **Credits: 3**
- GEOG 463 - Unmanned Aerial Systems for Remote Sensing and Spatial Data Acquisition **Credits: 3**

Total Certificate Requirements: 12

Urban Education Certificate

The 15-18 credit certificate in urban education prepares education majors for teaching in urban school districts, especially in low-income communities with high-minority enrollments, where the need for high-quality teachers is great. Coursework and field experiences emphasize the historical, economic, political, and socioeconomic contexts of urban schools and seek to develop within future teachers the skills, knowledge base, and dispositions for working with students whose backgrounds and life experiences may differ from their own.

Required Courses:

(1,2,3)

- EDUC 342 - Pre-student Teaching Clinical Experience II **Credits: 1**
(1)
- EDUC 441 - Student Teaching **Credits: 5-12**
or
- EDUC 421 - Student Teaching **Credits: 5-6**
- FDED 440 - Orientation to Teaching in Urban Centers **Credits: 2**
- FDED 441 - Field Experiences in Urban Education **Credits: 3**
(2)

Total Certificate Requirements:15-18

(1) Field experience portion of this course must be completed in an urban setting.

(2) This course may replace EDUC 242 in some education programs. Others may substitute this for the field experience portion of EDUC 242.

(3) Student teaching must be completed in an urban setting. The number of student teaching credits and the course numbers vary in accordance to the requirements of the major.

Vocational-Technical Education Certification

Liberal Studies: 15-16

As follows:

English:

- ENGL 101 - Composition I **Credits: 3**

Humanities:

- One course from list

Mathematics:

- MATH 151 - Elements of Mathematics I **Credits: 3**

Natural Science:

- One course, lab or non-lab

Social Science:

- PSYC 101 - General Psychology **Credits: 3**

College: 17

Professional Educational Sequence:

- ACE 103 - Digital Instructional Technology **Credits: 3**
- EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings **Credits: 2**
- EDEX 323 - Instruction of English Language Learners with Special Needs **Credits: 2**
- EDEX 458 - Transition Assessment and Planning for Youth with Disabilities **Credits: 3**
- EDSP 102 - Educational Psychology **Credits: 3**
- EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits: 3**
- EDUC 442 - School Law **Credits: 1**

Major: 25

Required Courses:

- VOED 101 - Introduction to Career and Technical Education **Credits: 1**
- VOED 102 - Instructional Planning in the Career and Technical Classroom **Credits: 2**
- VOED 103 - Strategies for Teaching Career and Technical Education **Credits: 3**
- VOED 201 - Making Accommodations for Students with Special Needs in the Career and Technical Classroom **Credits: 1**
- VOED 202 - Industry Linkages for Career and Technical Programs **Credits: 3**
- VOED 203 - Incorporating Reading and Communications Strategies in the Career and Technical Classroom **Credits: 3**
- VOED 301 - Integrating Math and Science in Career and Technical Education **Credits: 3**
- VOED 302 - Career Education in the Career and Technical Classroom **Credits: 3**
- VOED 404 - Research in Career and Technical Education **Credits: 3**
- VOED 405 - Professional Seminar in Career and Technical Education **Credits: 3**

Free Electives: 2-3

Total Certification Requirements: 60

Other Degrees

Anthropology Honors Program

The honors program is open by departmental permission to declared anthropology majors with a minimum 3.25 cumulative GPA and a 3.25 GPA in ANTH courses. Students who are thinking about attending graduate school in anthropology are encouraged to consider applying for this track. Students complete 6 credits of ANTH 483 Honors Thesis in Anthropology and two other honors courses. Students also may substitute graduate courses approved by the department for the two other honors courses if they meet the graduate school's requirements for undergraduates taking graduate level courses. To determine what courses they should take, as well as how Honors Track courses will be integrated into existing requirements for the anthropology major, students must consult closely with their advisors.

To apply, students must petition the department honors committee for admission no earlier than the second semester of their sophomore year. An application must be filed with the chairperson of the Department of Anthropology and should include an application form, a letter of intent, a description of the work plan, a full transcript, and two letters of recommendation from faculty members.

Prerequisites:

Declared major in anthropology, completion of 60cr, and permission of department honors committee, academic advisor, and department chair

Required Courses:

- ANTH 483 - Honors Thesis **Credits:** 1-6 (Honors)
- Two other honors courses **Credits:** 6 (1)

Total Honors Requirements: 12

(1) Students also may substitute graduate courses approved by the department for the two other honors courses if they meet the graduate school's requirements for undergraduates taking graduate-level courses.

Asian Studies Honors Program

The honors program is open by permission of the Asian Studies Committee to Asian Studies majors with a minimum 3.25 cumulative GPA and a 3.5 GPA in Asian Studies courses. Students complete 36 credits in Asian Studies (instead of the normal 33) including two semesters of honors thesis research and writing. Honors theses are completed individually under the direction of a professor who specializes in the student's area of interest and are approved by a thesis committee comprising the coordinator and two other readers, one of whom may come from outside the program.

Students interested in the Asian Studies honors program should discuss this opportunity as early as possible with their advisors. Students may file a declaration of intent during the sophomore year; a formal application for admission must be made, normally early in the junior year. The program is particularly encouraged for students intending to seek admission to graduate or professional schools. Honors course work is designated on university transcripts; students completing the honors program are recognized at commencement ceremonies.

Required Courses:

- Three additional credits in Asian Studies **Credits:** 3
- ASIA 483 - Honors Thesis **Credits:** 3 (1)

Total Honors Requirements: 9

(1) Two semesters, 3cr each.

Biology Honors Program

The honors program is open by departmental permission to all majors in the Department of Biology. Students who, by the end of the first semester of their sophomore year, have a minimum 3.25 cumulative GPA will be invited to apply for the program. The application will include a transcript and a personal statement outlining the student's academic plan, career goals, and why she or he wants to be considered for the honors program. A department honors committee (makeup to be determined by the department) will select a maximum of 12 students per year for the program.

Students accepted into the program will take BIOL 484 during the first semester of their junior year, two semesters of BIOL 483, and one 500- or 600-level BIOL course. The honors thesis will be based on research performed under the supervision of a department professor who specializes in the student's area of interest and must be approved by a thesis committee made up of the faculty member directing the student and two others, one of whom may come from outside the Department of Biology.

Students interested in the Biology Honors Program should discuss this opportunity with their advisors as early as possible so that they have achieved the necessary GPA and are prepared to make application for the program in the spring of their sophomore year. This program, though designed for all qualified students within the Department of Biology, should be of particular value to students intending to seek admission to graduate or professional schools. Honors course work is designated on university transcripts. Students completing the departmental honors program are recognized at departmental commencement ceremonies.

Required Courses:

- BIOL 484 - Honors Seminar **Credits:** 2 (1)
- BIOL 483 - Honors Thesis/Independent Study **Credits:** 1-6 (1, 2)
- BIOL 5XX/6XX - Graduate-level course **Credits:** 3 (3)

Total Honors Requirements: 9

(1) May be counted toward the BA, BS, and BSEd in Biology programs.

(2) Two semesters, 2cr each.

(3) Students must take one course at the 500/600 level during their junior or senior year. This will be in addition to the biology credits (currently 38 for all tracks) required for the major.

Center for Policy and Data Analysis

The Center for Policy and Data Analysis focuses on research, surveys, and studies to support the mission of IRHS. Recent projects include an analysis of traffic crashes in Pennsylvania through a grant from the Center for Rural Pennsylvania.

College of Education and Communications Honors Program

This track enables students to participate in advanced study in the areas of learning and instructional theory, motivation to learn, assessment of student learning, classroom management, and the psychology of adolescent education. The track utilizes course work currently in the Educational Psychology minor, which also carries honors courses designation. In addition, students complete an Honors Internship, EDSP 493. Students may complete the Educational Psychology minor while in the Honors Track if desired.

Honors course work is recorded on university transcripts, and students completing the Education Honors Track will be recognized at departmental commencement ceremonies.

Eligibility and Requirements: The Honors Track is open by permission to elementary and secondary education majors and educational psychology minors with a minimum 3.25 GPA in total university course work and a completed application. To apply, students should file an application with the chairperson of the Educational and School Psychology Department.

Students complete EDSP 102/H/ and EDSP 477/H/; two of the following electives: EDSP 373/H/, EDSP 476/H/, or EDSP 378/H/; and EDSP 493/H/ for a total of 13 credits. Students must earn at least a "B" in each course completed for the track to proceed and maintain a 3.25 cumulative GPA. To determine how Honors Track courses will be integrated into existing requirements for their major, students should consult their advisors.

College of Education and Communications Honors Program

The Honors Track enables students to participate in advanced study in the areas of learning and instructional theory, motivation to learn, assessment of student learning, classroom management, and the psychology of adolescent education. The Honors Track is encouraged for exceptional students in all fields of education. Honors course work is recorded on university transcripts, and students completing the Education Honors Track will be recognized at departmental commencement ceremonies.

Eligibility and Requirements: This track is open by permission to all education majors. To apply, an application should be filed with the Educational and School Psychology Department chairperson. Students may apply upon acceptance to IUP, or current students may make application following completion of one semester of course work. Applicants must have a minimum 3.25 GPA in total university or high school course work to apply. Students accepted before taking EDSP 102 complete EDSP 102/H/; EDSP 477/H/; EDSP 373/H/, EDSP 378/H/; and EDSP 493/H/. Students accepted following completion of a nonhonors section of EDSP 102 will be required to take all three of the courses offered (EDSP 373/H/ and EDSP 378 /H/) in addition to EDSP 477/H/ and the Honors Internship. Students must earn at least a B in each course completed for the track to proceed and must maintain a 3.25 cumulative GPA. To determine how Honors Track courses will be integrated into existing requirements for their major, students should consult their advisors.

Required Courses:

- EDSP 102 - Educational Psychology **Credits:** 3 (Honors)
- EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures **Credits:** 3 (Honors)
- EDSP 493 - Educational Psychology Honors Internship **Credits:** 1 (Honors)
- EDSP 373 - Psychology of Adolescent Education **Credits:** 3 (Honors)
- EDSP 378 - Learning **Credits:** 3 (Honors)

Total Honors Requirement: 13

Economics Honors Program

The honors program is open by departmental permission to economics and economics/pre-law majors in the College of Humanities and Social Sciences with a minimum 3.25 cumulative GPA and a 3.25 GPA in economics courses. Students complete ECON 355*, ECON 356/H/, and ECON 456/W/. In addition, students must choose one class from the following: CRIM 306, FIN 310, FIN 315, GEOG 316/RGPL 316, HIST 487 /H/, MATH 371, MATH 411, MATH 412, MATH 416, PLSC 370, PLSC 422, or SOC 460 . Students must earn at least a grade of "C" in each course completed for the track. Students should consult their advisors to determine how Honors Track courses may be integrated into existing requirements for the economics or economics/pre-law majors.

*In practice, MATH 214, MATH 216, or MATH 217 can be substituted for ECON 355.

To apply, complete the Economics Honors Track form, which is available in the Department of Economics office. In addition, a change of major form must be filed.

Required Courses: 9

- ECON 355 - Statistics for Economists **Credits:** 3 (1)
- ECON 356 - Introduction to Econometrics **Credits:** 3 (Honors)
- ECON 456 - Advanced Econometrics **Credits:** 3

One Course from the Following:

- CRIM 306 - Criminological Research Methods **Credits: 3**
 - FIN 310 - Fundamentals of Finance **Credits: 3**
 - FIN 315 - Financial Analysis Using Electronic Spreadsheets **Credits: 3**
 - GEOG 316 - Introduction to Geographic Information Systems **Credits: 3**
- or
- RGPL 316 - Introduction to Geographic Information Systems **Credits: 3**
 - MATH 341 - Differential Equations **Credits: 3**
 - MATH 363 - Mathematical Statistics I **Credits: 3**
 - MATH 371 - Linear Algebra **Credits: 3**
 - MATH 411 - Univariate Data Analysis **Credits: 3**
 - MATH 412 - Multivariate Statistics **Credits: 3**
 - MATH 416 - Time Series Analysis **Credits: 3**
 - PLSC 370 - The Practice of Public Administration **Credits: 3**
 - PLSC 422 - International Law and Organizations **Credits: 3**
 - SOC 460 - Social Research Methods I **Credits: 3**

Total Honors Requirements: 12

(1) MATH 214, MATH 216, or MATH 217 may be substituted for ECON 355.

English Honors Program

The honors program is open by departmental permission to declared English majors with a minimum 3.25 cumulative GPA and a 3.5 GPA in English courses.

To apply, students must submit a letter of application and a list of English courses taken (with instructors' names) to the chairperson of the Honors Track program. To be accepted, students must receive favorable evaluations from a majority of professors of courses taken and approval by the Honors Track program committee.

Students must complete one upper-level (300-400) H-designated course (3 credits) or ENGL 483/H Honors Thesis in English and ENGL 484 - Topics in English Studies. In conjunction with ENGL 484, students must take ENGL 485 - Honors English Portfolio/H .

Prerequisites:

Declared major in English, completion of ENGL 101, ENGL 122, and ENGL 202; 15cr in the major, including at least two survey courses; and permission of English Honors Track program committee

Required Courses:

Additional Requirements:

6cr in any combination of the following options:

- ENGL 483 - Honors Thesis **Credits: 1-6** (Honors)
- Any H-designated English course **Credits: 0-6**

Total Honors Requirements: 7

Geography Honors Program

The honors program is open by departmental permission to majors with at least a 3.25 GPA in total university course work and a 3.25 GPA in geography courses. After completing 45 credits of university course work, all qualified majors will be invited to join the Geography Honors Track. Social Studies Education/Geography Track majors are encouraged to participate, with the realization that participation will require more than 120 credits.

Students must maintain a 3.0 GPA in the track. To determine how Honors Track courses will be integrated into existing requirements for the geography major, students should consult their academic advisor. To apply, students must submit a letter of intent to the Geography program director. The student's advisor and one other Geography faculty member must endorse the student's application.

Prerequisites:

Declared major in geography, completion of at least 45cr of university course work, 3.25 or higher GPA in major and overall, plus endorsement of advisor and one other Geography faculty member

Select one of the following options:

Option 1:

- Two 600-level seminars

Two Courses from

- GEOG 333 - Trade and Transportation **Credits: 3**
- GEOG 334 - Political Geography **Credits: 3**
- GEOG 337 - Historical Geography **Credits: 3**
- GEOG 440 - Conservation: Environmental Analysis **Credits: 3 (1)**

Option 2:

- One 600-level seminar
- GEOG 483 (Honors) (2)

Two Courses from

- GEOG 333 - Trade and Transportation **Credits: 3**
- GEOG 334 - Political Geography **Credits: 3**
- GEOG 337 - Historical Geography **Credits: 3**
- GEOG 440 - Conservation: Environmental Analysis **Credits: 3 (1)**

Option 3:

- GEOG 483 (Honors) (2)

Three Courses From

- GEOG 333 - Trade and Transportation **Credits: 3**
- GEOG 334 - Political Geography **Credits: 3**
- GEOG 337 - Historical Geography **Credits: 3**
- GEOG 440 - Conservation: Environmental Analysis **Credits: 3**

Option 4:

- One 600-level seminar

Three Courses from

- GEOG 333 - Trade and Transportation **Credits: 3**
- GEOG 334 - Political Geography **Credits: 3**
- GEOG 337 - Historical Geography **Credits: 3**
- GEOG 440 - Conservation: Environmental Analysis **Credits: 3 (1)**

Total Honors Requirements: 12

(1) Students in these designated undergraduate courses will undertake an honors project identified in conjunction with the course instructor and reviewed by the Geography program director or the department chair (if the director is the course instructor).

(2) Credits for GEOG 483 are counted in the appropriate departmental concentration requirement.

History Honors Program

The honors track is open by departmental permission to history, history/ pre-law, and social studies education/history majors with a minimum 3.25 cumulative GPA and a 3.5 GPA in history courses. All students write an honors thesis, which is completed over two semesters under the direction of a department professor who specializes in the student's area of interest. The thesis is approved by a thesis committee comprising the director and two other readers, one of whom may come from outside the History Department.

Honors students also take an honors (H) designated 300+ history class. All Honors history courses count toward the major.

Students interested in the History Honors Track should discuss this opportunity as early as possible with their advisors. Students may file a declaration of intent during the sophomore year; a formal application for admission must be made, normally early in the junior year. The program is particularly encouraged for students intending to seek admission to graduate or professional schools. Honors coursework is designated on university transcripts; students completing the departmental honors program are recognized at departmental commencement ceremonies.

Required Courses

- HIST 483 - Honors Thesis **Credits: 3-6 (1)**
- HIST (H) Honors designated 300+ history course **Credits: 3**

Total Honors Requirements: 9

(1) Two semesters, 3cr each.

Knowledge Area

Humanities: 9

Three Courses

*One course in history, one in literature, and one in philosophy or religious studies.

History:

- HIST 196 - Explorations in US History **Credits: 3**

- HIST 197 - Explorations in European History **Credits: 3**
- HIST 198 - Explorations in Global History **Credits: 3**

Literature:

- ENGL 121 - Humanities Literature **Credits: 3**
- ENGL 122 - Introduction to English Studies **Credits: 3** (English majors)
- FNLG 121 - Humanities Literature **Credits: 3** (taught in English)
- MUHI 102 - Music and Literature Survey **Credits: 3** (music education majors only)

Philosophy or Religious Studies:

- PHIL 100 - Introduction to Philosophy **Credits: 3**
- PHIL 101 - Critical Thinking **Credits: 3**
- PHIL 122 - Contemporary Moral Issues **Credits: 3**
- PHIL 130 - Introduction to Biomedical Ethics **Credits: 3**
- PHIL 223 - Philosophy of Art **Credits: 3**
- PHIL 240 - Philosophy and the Good Life **Credits: 3**
- RLST 100 - Introduction to Religion **Credits: 3**
- RLST 110 - World Religions **Credits: 3**
- RLST 120 - Comparative Religious Ethics **Credits: 3 (GMA)**

Fine Arts: 3

One Course from List

- ARHI 101 - Introduction to Art **Credits: 3**
- DANC 102 - Introduction to Dance **Credits: 3**
- FIAR 101 - Introduction to Fine Arts **Credits: 3**
- MUHI 101 - Introduction to Music **Credits: 3**
- MUHI 102 - Music and Literature Survey **Credits: 3** (music education majors only)
- THTR 101 - Introduction to Theatre **Credits: 3**
- THTR 161 - Introduction to Theatre: Interpersonal Practices **Credits: 3**

Natural Science: 7-8

One Option

Option I: Two-Semester Laboratory Course Sequence: 8

Two courses with laboratories (4cr each) from the Natural Science Laboratory course list. These two courses do not have to be taken in sequence.

Natural Science Laboratory Courses:

- BIOL 103 - Life on Earth **Credits: 4**
- BIOL 104 - Human Biology: How the Human Body Works **Credits: 4**
- BIOL 106 - Human Genetics and Health **Credits: 3**
- BIOL 116 - Human Genetics and Health Laboratory **Credits: 1**
- CHEM 101 - College Chemistry I **Credits: 4**
- CHEM 102 - College Chemistry II **Credits: 4**
- CHEM 111 - General Chemistry I **Credits: 4**

- CHEM 112 - General Chemistry II **Credits: 4**
- CHEM 113 - Advanced General Chemistry I **Credits: 4**
- CHEM 114 - Advanced General Chemistry II **Credits: 4**
- GEOS 101 - The Dynamic Earth **Credits: 3** and
- GEOS 102 - The Dynamic Earth Lab **Credits: 1**
- GEOS 103 - Oceans and Atmospheres **Credits: 3** and
- GEOS 104 - Oceans and Atmospheres Lab **Credits: 1**
- GEOS 105 - Exploring the Universe **Credits: 3** and
- GEOS 106 - Exploring the Universe Lab **Credits: 1**
- GEOS 111 - Earth and Environmental Systems **Credits: 4**
- GEOS 201 - Foundations of Geology **Credits: 4**
- GEOS 203 - Surficial Processes **Credits: 4**
- GEOS 204 - Historical Geology **Credits: 4**
- PHYS 111 - Physics I Lecture **Credits: 3** and
- PHYS 121 - Physics I Lab **Credits: 1**
- PHYS 112 - Physics II Lecture **Credits: 3** and
- PHYS 122 - Physics II Lab **Credits: 1**
- PHYS 131 - Physics I-C Lecture **Credits: 3** and
- PHYS 141 - Physics I-C Lab **Credits: 1**
- PHYS 132 - Physics II-C Lecture **Credits: 3** and
- PHYS 142 - Physics II-C Lab **Credits: 1**
- PHYS 151 - Medical Physics Lecture **Credits: 3** and
- PHYS 161 - Medical Physics Lab **Credits: 1**
- SCI 105 - Physical Science I **Credits: 4**
- SCI 107 - Chemistry for Everyone **Credits: 3** and
- SCI 117 - Chemistry for Everyone Laboratory **Credits: 1**

Option II: One Laboratory plus One Non-laboratory Course: 7

One course with laboratory (4cr) from the Natural Science Laboratory course list and one course (3cr) from Natural Science Non-laboratory course list.

Natural Science Non-Laboratory Courses:

- BIOL 106 - Human Genetics and Health **Credits: 3**
- BIOL 107 - Introduction to Forensic Biology **Credits: 3**
- BIOL 115 - Biotic Diversity of North America **Credits: 3**
- BIOL 117 - Understanding HIV Biology and AIDS **Credits: 3**
- BIOL 118 - The History of Pain **Credits: 3**
- BIOL 119 - Emerging Diseases **Credits: 3**
- CHEM 105 - The Forensic Chemistry of CSI **Credits: 3**
- CHEM 255 - Biochemistry for Health Sciences **Credits: 3**
- GEOS 101 - The Dynamic Earth **Credits: 3**

- GEOS 103 - Oceans and Atmospheres **Credits: 3**
- GEOS 105 - Exploring the Universe **Credits: 3**
- GEOS 119 - Geology of Energy Resources **Credits: 3**
- GEOS 150 - Geology of National Parks **Credits: 3**
- GEOS 151 - The Age of Dinosaurs **Credits: 3**
- GEOS 152 - Physical Resources of the Earth **Credits: 3**
- GEOS 154 - Human Exploration of Space **Credits: 3**
- GEOS 155 - Geology of Climate Change **Credits: 3**
- GEOS 156 - Geology of Natural Disasters **Credits: 3 (GMA)**
- PHYS 101 - Energy and Our Environment **Credits: 3**
- PHYS 105 - The Physics of Light and Sound **Credits: 3**
- PHYS 111 - Physics I Lecture **Credits: 3**
- PHYS 112 - Physics II Lecture **Credits: 3**
- PHYS 131 - Physics I-C Lecture **Credits: 3**
- PHYS 132 - Physics II-C Lecture **Credits: 3**
- PHYS 151 - Medical Physics Lecture **Credits: 3**
- SCI 107 - Chemistry for Everyone **Credits: 3**
- SCI 113 - Physics in Science Fiction **Credits: 3**

Social Science: 9

Three Courses from List

*No course prefix may be used more than once

- ANTH 110 - Contemporary Anthropology **Credits: 3 (GMA)**
- ANTH 211 - Cultural Anthropology **Credits: 3 (GMA)**
- ANTH 213 - World Archaeology **Credits: 3 (GMA)**
- CRIM 101 - Crime and Justice Systems **Credits: 3**
- ECON 101 - Basic Economics **Credits: 3**
- ECON 121 - Principles of Macroeconomics **Credits: 3**
- GEOG 101 - Environment and Society **Credits: 3**
- GEOG 102 - Geography of the United States and Canada **Credits: 3**
- GEOG 104 - World Geography: Global Context **Credits: 3 (GMA)**
- JRNL 105 - Journalism and the Mass Media **Credits: 3**
- PLSC 101 - World Politics **Credits: 3 (GMA)**
- PLSC 111 - American Government **Credits: 3**
- PSYC 101 - General Psychology **Credits: 3**
- RGPL 103 - Global Cities: Planning and Development **Credits: 3 [same as GEOG 103] (GMA)**
- SOC 151 - Principles of Sociology **Credits: 3**
- SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations **Credits: 3 (GMA)**
- SOC 231 - Contemporary Social Problems **Credits: 3**

Dimensions of Wellness: 3

One Course

- COMM 143 - Media Wellness **Credits: 3**
- COSC 143 - Cyber Wellness **Credits: 3**
- ECON 143 - Financial Wellness **Credits: 3**
- FCSE 143 - Financial Wellness **Credits: 3**
- FDNT 143 - Current Issues in Nutrition and Wellness **Credits: 3**

- FIN 143 - Financial Wellness **Credits: 3**
- KHSS 143 - Wellness **Credits: 3**
- NURS 143 - Healthy People—Promoting Wellness **Credits: 3**

An alternate method of fulfilling this requirement is the completion of one year of Military Science/ROTC: MLSC 101 - Introduction to Military Science (2cr) and MLSC 102 - Fundamentals of Military Science (2cr). Verified successful completion of Basic Training in any US Armed Service is transferable as MLSC 101 and MLSC 102. MLSC 203 and MLSC 204 may be substituted for MLSC 101 and MLSC 102.

Global and Multicultural Awareness: 3

Students must fulfill this requirement by completing one course. Most of the courses will at the same time fulfill other requirements set by Liberal Studies or in some cases by a college or department. These include courses from Natural Science, Social Science, and Liberal Studies Electives and are identified by GMA following their titles.

In addition, the following courses can be used to fulfill Global and Multicultural Awareness requirement only.

- ECON 338 - Poverty in Africa **Credits: 3**
- ECON 339 - Economic Development I **Credits: 3**
- ECON 345 - International Trade **Credits: 3**
- ECON 346 - International Finance **Credits: 3**
- GEOG 252
- MGMT 350 - International Business **Credits: 3**
- MKTG 350 - International Business **Credits: 3**
- MGMT 451 - International Management **Credits: 3**
- MGMT 454 - International Competitiveness **Credits: 3**
- PLSC 285 - Comparative Government II: Non-Western Political Systems **Credits: 3**
- SPAN 244 - Modern Mexico **Credits: 3**
- SPAN 344 - Spanish-American Cultures from the 19th Century to the Present **Credits: 3**
- SPAN 364 - Survey of Spanish-American Literature **Credits: 3**
- WGS 301 - Asian American and Asian Diasporic Women's Literature **Credits: 3**

Certain Study Abroad programs in Global and Multicultural Awareness areas are offered. For more information, visit the Office of International Education.

Learning Skills

English Composition: 6

Two Courses

- ENGL 101 - Composition I **Credits: 3**
- ENGL 202 - Composition II **Credits: 3** (sophomore standing)

Mathematics: 3-4

- MATH 101 - Foundations of Mathematics **Credits: 3**
- MATH 105 - College Algebra **Credits: 3**
- MATH 107 - Business Mathematics **Credits: 3** (1)
- MATH 108 - Applications of Business Mathematics **Credits: 1** (1)
- MATH 121 - Calculus I for Natural and Social Sciences **Credits: 4**
- MATH 125 - Calculus I/Physics, Chemistry, Mathematics **Credits: 3**

- MATH 151 - Elements of Mathematics I **Credits:** 3 (1)
- MATH 217 - Probability and Statistics **Credits:** 3

Note

(1) Restricted to designated majors

Liberal Studies Electives

- No course carrying the student's major prefix may be used.
- No course prefix may be used more than once, except for intermediate-level foreign language prefixes (CHIN, FRNC, GRMN, JAPN, KORE, and SPAN), which may be used twice.
- Refer to program of study for specific requirements.

Courses: 6cr

Global Citizenship

- ANTH 271 - Cultural Area Studies: Africa **Credits:** 3 (GMA)
- ANTH 272 - Culture Area: China **Credits:** 3 (GMA)
- ANTH 274 - Cultural Area Studies: Latin America **Credits:** 3 (GMA)
- ANTH 310 - Voyages of Discovery **Credits:** 3 (GMA)
- ANTH 314 - Contemporary Native American Cultures **Credits:** 3 (GMA)
- ANTH 350 - Anthropology of Gender **Credits:** 3 (GMA)
- ANTH 365 - Native North American Religions **Credits:** 3 (GMA)
- ANTH 370 - Latinos and Diasporas **Credits:** 3 (GMA)
- ANTH 430 - Anthropology of Food **Credits:** 3 (GMA)
- CDFR 218 - Child Development **Credits:** 3
- CDFR 224 - Marriage and Family Relations **Credits:** 3
- COMM 230 - Global Media and Communication **Credits:** 3
- COMM 325 - Gender in Media **Credits:** 3
- ECON 122 - Principles of Microeconomics **Credits:** 3
- GEOG 230 - Cultural Geography **Credits:** 3
- GEOG 231 - Economic Geography **Credits:** 3
- GEOG 254 - Geography of Russia, Central Eurasia, and Eastern Europe **Credits:** 3
- GEOG 255 - Geography of Africa **Credits:** 3
- GEOG 257 - Geography of South and Southwest Asia **Credits:** 3
- HIST 313 - Europe Since 1945: Division, Revolution, and Unity **Credits:** 3
- HIST 365 - History of Black America since Emancipation **Credits:** 3
- HIST 385 - People in Nature: An Introduction to Environmental History **Credits:** 3
- LAS 480 - Latin American Studies Seminar **Credits:** 3
- MUHI 223 - Musical Cultures from Around the World **Credits:** 3
- MUHI 301 - Music History I **Credits:** 3
- MUHI 333 - History of Popular Music Since 1945 **Credits:** 3
- PHIL 270 - Ethics and the Environment **Credits:** 3
- PHIL 323 - Political Philosophy **Credits:** 3
- PHIL 324 - Ancient Greek Philosophy **Credits:** 3
- PHIL 450 - Philosophy of Law **Credits:** 3
- PLSC 389 - International Development Strategies **Credits:** 3
- PSYC 225 - Abnormal Psychology **Credits:** 3
- PSYC 378 - Psychology of Death and Dying **Credits:** 3
- RLST 311 - Eastern Philosophy **Credits:** 3

- RLST 365 - Native North American Religions **Credits: 3**
- RLST 370 - Religions: China and Japan **Credits: 3**
- RLST 374 - Buddhism **Credits: 3 (GMA)**
- RLST 380 - Islam **Credits: 3**
- RLST 385 - Christianity **Credits: 3**
- RLST 388 - Interpreting the Bible **Credits: 3**
- SOC 251 - Sociology of Human Sexuality **Credits: 3**
- SOC 314 - Sociology of Native Americans **Credits: 3**
- SOC 337 - Society, Globalization, and Risk **Credits: 3**
- SOC 361 - Social Stratification **Credits: 3**
- SOC 362 - Racial and Ethnic Minorities **Credits: 3**
- SOC 363 - Sociology of Gender **Credits: 3**
- SUST 201 - Introduction to Sustainability Studies **Credits: 3**
- WGS 200 - Introduction to Women's and Gender Studies **Credits: 3**

Information Literacy

- ASIA 106 - Samurai and Gongfu Heroes: Masculinity in East Asia **Credits: 3**
- ASIA 200 - Introduction to Asian Studies **Credits: 3**
- ARHI 205 - Ancient to Medieval Art **Credits: 3**
- ARHI 224 - Introduction to Asian Art **Credits: 3**
- ARHI 427 - Japanese Narrative Art **Credits: 3**
- COMM 101 - Introduction to Communications, Media, and Culture **Credits: 3**
- COMM 201 - Internet and Multimedia **Credits: 3**
- COMM 261 - Teamwork and Communication Skills for College and Career **Credits: 3**
- COMM 325 - Gender in Media **Credits: 3**
- COMM 380 - The History of African Americans in Film **Credits: 3**
- COMM 420 - Media Portrayal of Crime **Credits: 3**
- CRIM 420 - Media Portrayal of Crime **Credits: 3**
- EDSP 102 - Educational Psychology **Credits: 3**
- FCSE 315 - Consumer Economics and Family Finance **Credits: 3**
- FDNT 145 - Personal Nutrition **Credits: 3**
- HIST 106 - Samurai and Gongfu Heroes: Masculinity in East Asia **Credits: 3**
- HIST 206 - The History of East Asia **Credits: 3**
- HIST 207 - The History of the Middle East **Credits: 3**
- HIST 230 - Queer Global History **Credits: 3**
- HIST 231 - History of Jerusalem **Credits: 3**
- HIST 232 - Stalin and Hitler and the Terror State **Credits: 3**
- HIST 240 - Zombies: A Cultural History of Death, Disease, and Technology **Credits: 3**
- HIST 265 - The History of Power: Its Uses and Abuses **Credits: 3**
- HIST 305 - Renaissance and Reformation **Credits: 3**
- HIST 306 - Early Modern Europe **Credits: 3**
- HIST 323 - France, 1815 to the Present **Credits: 3**
- HIST 332 - History of Early China **Credits: 3**
- HIST 338 - The History of Iran **Credits: 3**
- HIST 348 - Top Secret America: The Rise and Reach of the National Security State **Credits: 3**
- HIST 360 - History of Pennsylvania **Credits: 3**
- HIST 365 - History of Black America since Emancipation **Credits: 3**
- HIST 374 - History of Organized Crime **Credits: 3**
- HIST 433 - China 1300-1800: The Late Imperial Age **Credits: 3**
- HIST 434 - Modern China 1800-present **Credits: 3**
- HIST 436 - Japan 1500-1850: Early Modern Japan **Credits: 3**
- HIST 437 - Modern Japan 1850-Present **Credits: 3**
- IFMG 110 - Business Spreadsheet Computing **Credits: 3**

- JRNL 375 - World News Coverage **Credits: 3**
- KHSS 225 - Social Issues in Sport **Credits: 3**
- LIBR 201 - Internet and Multimedia **Credits: 3**
- LIBR 251 - Information Access in the Digital Age **Credits: 2**
- MUHI 301 - Music History I **Credits: 3**
- MUHI 302 - Music History II **Credits: 3**
- PLSC 251 - State and Local Political Systems **Credits: 3**
- PLSC 348 - Top Secret America: The Rise and Reach of the National Security State **Credits: 3**
- RLST 385 - Christianity **Credits: 3**
- RLST 388 - Interpreting the Bible **Credits: 3**
- SAFE 100 - The Science of Living Safely **Credits: 3**
- SOC 269 - Sociology of Deviance **Credits: 3**
- THTR 313 - American Theater Between the Wars **Credits: 3**

Oral Communication

- CHIN 102 - Elementary Chinese II **Credits: 4**
- CHIN 201 - Intermediate Chinese **Credits: 4**
- COMM 261 - Teamwork and Communication Skills for College and Career **Credits: 3**
- FRNC 102 - Basic French II **Credits: 4**
- FRNC 201 - Intermediate French **Credits: 4**
- GRMN 102 - Elementary German II **Credits: 4**
- GRMN 201 - Intermediate German **Credits: 4**
- GRMN 220 - Intermediate German Conversation **Credits: 3**
- JAPN 102 - Elementary Japanese II **Credits: 4**
- JAPN 201 - Intermediate Japanese **Credits: 4**
- JRNL 361 - Presentation Making **Credits: 3**
- KORE 102 - Elementary Korean II **Credits: 4**
- KORE 201 - Intermediate Korean **Credits: 4**
- RLST 385 - Christianity **Credits: 3**
- RLST 388 - Interpreting the Bible **Credits: 3**
- SPAN 102 - Elementary Spanish II **Credits: 4**
- SPAN 201 - Intermediate Spanish **Credits: 4**
- SPAN 220 - Intermediate Spanish Conversation **Credits: 3**
- THTR 132 - Introduction to Acting **Credits: 3**
- THTR 313 - American Theater Between the Wars **Credits: 3**

Quantitative Reasoning

- ECON 122 - Principles of Microeconomics **Credits: 3**
- ECON 239 - Economics of Sports **Credits: 3**
- FCSE 315 - Consumer Economics and Family Finance **Credits: 3**
- LAS 350 - The Mayas: Culture, Literature, and Numbers **Credits: 3**
- MATH 122 - Calculus II for Natural and Social Sciences **Credits: 4**
- MATH 126 - Calculus II/Physics, Chemistry, Mathematics **Credits: 3**
- MATH 152 - Elements of Mathematics II **Credits: 3**
- MATH 214 - Probability and Statistics for Business Majors **Credits: 3**
- MATH 216 - Probability and Statistics for Natural Sciences **Credits: 3**
- MATH 217 - Probability and Statistics **Credits: 3**
- MATH 225 - Calculus III/Physics, Chemistry, Mathematics **Credits: 3**
- MATH 341 - Differential Equations **Credits: 3**

Scientific Literacy

- ANTH 250 - Human Origins **Credits: 3**
- FCSE 315 - Consumer Economics and Family Finance **Credits: 3**
- PHIL 330 - Philosophy of Science **Credits: 3**
- PSYC 215 - Developmental Psychology **Credits: 3**
- PSYC 235 - Social Psychology **Credits: 3**
- SAFE 100 - The Science of Living Safely **Credits: 3**

Technology Literacy

- COSC 101 - Computer Literacy **Credits: 3**
- FCSE 315 - Consumer Economics and Family Finance **Credits: 3**
- GEOG 105 - Our Digital Earth: Mobile Devices, Web Applications, and Geospatial Technology **Credits: 3**
- HIST 230 - Queer Global History **Credits: 3**
- HIST 240 - Zombies: A Cultural History of Death, Disease, and Technology **Credits: 3**
- IFMG 101 - Computer Literacy **Credits: 3**
- LIBR 251 - Information Access in the Digital Age **Credits: 2**

Liberal Studies Requirements

Learning Skills

Knowledge Area

Liberal Studies Electives

Writing Across the Curriculum

Military Science Program

Required Courses:

- MLSC 101 - Introduction to Military Science **Credits: 2 (1)**
- MLSC 102 - Fundamentals of Military Science **Credits: 2 (1)**
- MLSC 203 - Fundamentals of Tactical Operations, Techniques of Leadership, and Weapons Characteristics **Credits: 2 (2)**
- MLSC 204 - National Security and Fundamentals of Military Topography **Credits: 2 (2)**
- MLSC 305 - Fundamentals of Leadership and Modern Learning/Teaching Relationship **Credits: 3**
- MLSC 306 - Study of Advance Leader Planning and Execution of Modern Combat Operations **Credits: 3**
- MLSC 407 - Management of the Military Complex to Include Fundamentals of Military and International Law **Credits: 3**
- MLSC 408 - Seminar in Military Analysis and Management **Credits: 3**
- HIST 251 - United States Military History **Credits: 3**

Total Program Requirements: 23

- (1) MLSC 101-MLSC 102 may substitute for the Liberal Studies requirement in Health and Wellness.
 (2) MLSC 203-MLSC 204 are available as free electives to all students without any military obligation.

Philosophy Honors Program

The department offers students an opportunity to graduate with honors in philosophy. The option is encouraged for students intending to pursue graduate or advanced professional degrees. Philosophy majors and philosophy/ pre-law majors may be invited to apply or may

nominate themselves. In either case, to be considered for Honors in Philosophy, students must have earned at least 60 credits in total, with a minimum 3.25 cumulative GPA and a minimum 3.5 GPA in philosophy courses. Honors in Philosophy requires completion of a two-semester, 6-credit, Honors Thesis Independent Study. The honors thesis is completed individually under the direction of a department professor who specializes in the student's area of interest and is approved by a thesis committee comprising the director and two other readers. To determine how honors will be integrated into existing requirements for the philosophy or philosophy/pre-law major, students should consult their assigned advisors. Students completing the departmental honors program are recognized at departmental commencement ceremonies.

Required Course:

- PHIL 483 - Honors Thesis **Credits:** 1-6 (Honors)

Total Honors Requirements: 6

Regional Planning Honors Program

The honors program is open by departmental permission to regional planning majors with at least a 3.25 GPA in total university course work and a 3.25 GPA in regional planning courses. After completing 45 credits of university course work, all qualified majors will be invited to join the Regional Planning Honors Track.

Students select one of the following options: (1) Two courses from RGPL 333, RGPL 345, RGPL 426, or RGPL 440 and two 600-level (graduate seminar) courses, (2) Two courses from RGPL 333, RGPL 345, RGPL 426, or RGPL 440 and one 600-level (graduate seminar) course and RGPL 483 Honors Thesis, (3) Three courses from RGPL 333, RGPL 345, RGPL 426, or RGPL 440 and RGPL 483 Honors Thesis, (4) Three courses from RGPL 333, RGPL 345, RGPL 426, or RGPL 440 and one 600-level (graduate seminar) course. Honors students who enroll in the above designated undergraduate courses will undertake an honors project identified in conjunction with the course instructor and reviewed by the Regional Planning program director or the department chair (if the director is the course instructor).

Prerequisites:

Declared major in regional planning, completion of at least 45cr of university course work, 3.25 or higher GPA in major and overall, plus endorsement of advisor and one other Regional Planning faculty member

Select One of the Following Options:

Option 1:

- Two 600-level seminars

Two from

- RGPL 333 - Trade and Transportation **Credits:** 3
- RGPL 345 - Biogeography for Environmental Managers **Credits:** 3
- RGPL 426 - Environmental Land Use Planning **Credits:** 3
- RGPL 440 - Conservation: Environmental Analysis **Credits:** 3 (1)

Option 2:

- One 600-level seminar
- RGPL 483 (Honors) (2)

Two from

- RGPL 333 - Trade and Transportation **Credits: 3**
- RGPL 345 - Biogeography for Environmental Managers **Credits: 3**
- RGPL 426 - Environmental Land Use Planning **Credits: 3**
- RGPL 440 - Conservation: Environmental Analysis **Credits: 3 (1)**

Option 3:

- RGPL 483 (Honors) (2)

Three from

- RGPL 333 - Trade and Transportation **Credits: 3**
- RGPL 345 - Biogeography for Environmental Managers **Credits: 3**
- RGPL 426 - Environmental Land Use Planning **Credits: 3**
- RGPL 440 - Conservation: Environmental Analysis **Credits: 3 (1)**

Option 4:

- One 600-level seminar

Three from

- RGPL 333 - Trade and Transportation **Credits: 3**
- RGPL 345 - Biogeography for Environmental Managers **Credits: 3**
- RGPL 426 - Environmental Land Use Planning **Credits: 3**
- RGPL 440 - Conservation: Environmental Analysis **Credits: 3 (1)**

Total Honors Requirements: 12

(1) Students in these designated undergraduate courses will undertake an honors project identified in conjunction with the course instructor and reviewed by the Regional Planning program director or the department chair (if the director is the course instructor).

(2) Credits for RGPL 483 are counted in the appropriate departmental track requirement.

Religious Studies Honors Program

The honors program is open by departmental invitation to religious studies majors with a minimum 3.25 cumulative GPA and a 3.5 GPA in religious studies courses. Students complete RLST 480/H/, RLST 483/H/, and RLST 493/H/. To determine how Honors Track courses will be integrated into existing requirements for the religious studies major, students should consult their advisors.

Required Courses:

- RLST 480 - Seminar in Religious Studies **Credits: 3 (Honors)**
- RLST 483 - Honors Thesis **Credits: 1-6 (Honors)**
- RLST 493 - Internship in Religious Studies **Credits: 3-12 (Honors)**

Total Honors Requirements: 12

Requirements for Students Admitted as Freshmen

Required Courses: 18

- HNRC 101 - Honors Core I **Credits:** 5 (1)
- HNRC 102 - Honors Core II **Credits:** 5 (1)
- HNRC 201 - Honors Core III **Credits:** 4 (1)
- HNRC 202 - Honors Core: Sciences **Credits:** 4 (2)

Additional Honors Coursework/Experiential Education: 6

- Completion of H-Designated Course **Credits:** 3
or
- Departmental Honors Thesis **Credits:** 3 (3)

- Completion of Experiential Education Requirement **Credits:**3 (4)

Cook Honors College Requirements: 24

(1) HNRC 101, HNRC 102, and HNRC 201 replace Liberal Studies requirements for Composition I (ENGL 101), and three humanities courses (ENGL 121; HIST 196, HIST 197, or HIST 198; and either RLST 100 or PHIL 120), and one fine arts course (either ARHI 101/MUHI 101/THTR 101 or DANC 102). In addition, students who complete honors units offered by social science departments will receive Liberal Studies social science credits for the appropriate corresponding departmental course.

(2) HNRC 202 replaces Liberal Studies requirements for either one non-laboratory science and one social science or two non-laboratory sciences or two social sciences, depending on the units selected.

(3) Departmental honors courses (H-designated courses) count toward the total number of honors credits required for Cook Honors College graduation. Students are also encouraged to complete an undergraduate thesis. Students may enroll for thesis credit by completing the necessary approval forms and scheduling HNRC 483 honors thesis/independent study or, in some departments, by scheduling a departmental honors thesis course

(4) Students are required to do at least one of the following experiential components: study abroad, internship, honors thesis, or independent study. In the absence of a suitable cocurricular experience, an additional graduate course may be substituted. This requirement may or may not be a credit-bearing experience.

Sociology Honors Program

The honors program is open by departmental permission to declared sociology majors with a minimum 3.25 cumulative GPA and a 3.5 declared GPA in sociology courses. Students who are considering attending graduate school are encouraged to apply to the honors program. Students complete two 500, 600, or 700 Sociology (SOC) master's-level courses and 6 credits of SOC 483. Students may not repeat 500 dual-level courses if the student has already taken the course at the 400-level. Students must meet graduate school requirements before enrolling in graduate-level courses. Students should be aware that, in accordance with university policy, graduate-level courses taken for the Honors Track cannot later be applied toward an IUP graduate program. SOC 320 is a prerequisite for enrollment in graduate classes and thesis credits. Pending approval, a student may substitute up to two honors courses for one or two of the graduate-level courses. Students must earn at least a grade of "B" in each course completed for the track and must maintain a 3.25 cumulative GPA. To determine how Honors Track courses will be integrated into existing requirements for the sociology major, students should consult their advisors.

Students may be invited to apply or may nominate themselves. In either case, to be considered for the Sociology Honors Track, students must have earned 15 credits in sociology. Sociology majors who have met the eligibility requirements must submit an application to the chairperson of the Department of Sociology after they have earned at least 60 credits, but prior to their senior year. Students are encouraged to apply for the honors program in the last semester of their sophomore or first semester of their junior year.

Prerequisites:

- Declared major in sociology and completion of 60cr, SOC 320, and 12 additional credits in SOC

Required Courses:

- CHSS 489 - Honors Colloquium **Credits:** 3 (Honors)
- HNRC 499 - Honors Senior Synthesis **Credits:** 3-6 (1)
- SOC 483 - Honors Thesis **Credits:** 1-6 (Honors)

Total Honors Requirements: 12

(1) Credits for HNRC 499 are counted in the Liberal Studies synthesis requirement.

Spanish Honors Program

The honors program is open by departmental permission to Spanish and Spanish education K-12 majors with a minimum 3.25 cumulative GPA and a 3.25 GPA in Spanish courses.

To apply, students must submit two letters of reference from department faculty members and a two-page self-statement describing the student's academic and career goals.

Students complete two semesters of SPAN 483 /H/, CHSS 489 (a multidisciplinary colloquium emphasizing problem solving, discussion, reading, and writing on a topic or theme), and one course from SPAN 410-SPAN 431 . Students must earn at least a grade of "B" in each course completed for the track. To determine how Honors Track courses will be integrated into existing requirements for the Spanish or Spanish education K-12 major, students should consult their advisors.

Required Courses:

Total Honors Requirements: 12

Course Descriptions

Credit designation at right of title is expressed in (c) class hours per week, (l) lab or (d) discussion section hours per week, and (cr) number of credits per semester.

Accounting

ACCT 200 - Foundations of Accounting

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Provides a framework in which nonbusiness majors can see how accounting relates to, and reports on, business activities. Introduces the basic financial accounting concepts, principles, and practices applied to the preparation and interpretation of the major financial statements. Takes a business process approach to the information requirements of external decision makers.

ACCT 201 - Accounting Principles I

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces the basic financial accounting concepts, principles, and practices applied to the preparation and interpretation of the major financial state-

ments. Includes complete coverage of the accounting cycle, which will satisfy the information requirements of external decision makers. Topics covered are: asset valuation, liability measurement, income determination, and equity activities. Integrated throughout is a discussion of ethical issues and considerations.

ACCT 202 - Accounting Principles II

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ACCT 201

Introduces traditional managerial accounting concepts and procedures utilized in the organization and processing of accounting information for management decision-making purposes. Topics include managerial accounting and the business environment, cost terms and concepts, cost systems, cost behavior, and cost-volume-profit analysis. Also covers the master budget, standard costing and variance analysis, performance evaluation, responsibility accounting, relevant cost analysis, and decision making.

ACCT 304 - Intermediate Accounting I

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grade of "C" or better in ACCT 202

Primarily focuses on financial reporting for asset wealth typically found in business environments. Coverage includes recognition and measurement of such assets as cash, receivables, investments, inventories, plant assets, and intangible assets. Present value concepts in financial reporting are also emphasized.

ACCT 305 - Intermediate Accounting II

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grade of "C" or better in ACCT 304

Concentrates on financial reporting of creditor and investor claims on business assets in the form of liabilities and equity. Specialized financial reporting topics such as earnings per share, stock options, income tax, pension, and lease accounting are also covered.

ACCT 311 - Cost Accounting

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grade of "C" or better in ACCT 202

Studies the aggregation and use of financial information for internal management decision making. Discussions concentrate on cost management system design, cost estimation methods for budget preparation and achievement, cost accumulation methods for manufacturing and service organizations, inventory control procedures, transfer pricing administration, and managerial performance evaluation techniques.

ACCT 401 - Advanced Accounting

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ACCT 305

A study of accounting issues of specialized nature including partnerships, organization and liquidation, agency and branch accounting, accounting for business combinations, preparation of consolidated financial statements, accounting for government and not-for-profit entities, accounting for estates and trusts, and receivership accounting.

ACCT 412 - Advanced Cost Accounting

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grade of "C" or better in ACCT 311

A study of budgets, standard costs, direct and absorption costing, analysis of cost variances, and extensive analysis of various cost control and profit planning programs.

ACCT 421 - Federal Tax I

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grade of "C" or better in ACCT 202

Introduces the fundamental concepts of federal taxation, with special emphasis on individuals. Creates an awareness and recognition of the tax consequences involved in financial decision making, with special emphasis on use of professional tax software and Internet resources.

ACCT 422 - Federal Tax II

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ACCT 421

Introduces the fundamental concepts of federal taxation of corporations, partnerships, estates, and gift transactions. Creates an awareness and recognition of the tax consequences involved in financial decision making, with special emphasis on use of professional tax software, the Internal Revenue Code and Regulations, and Internet research.

ACCT 431 - Auditing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ACCT 304

A study of auditing theory and practical application of auditing standards and procedures to the review, testing, and evaluation of accounting controls and to the verification of transactions and balances to express an opinion in an audit report on the fairness of financial statements' presentation.

ACCT 432 - Forensic and Internal Auditing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ACCT 431

Introduces forensic auditing in fraudulent financial reporting and employee theft. Also covers the foundation of internal auditing and operational audits performed by internal auditors.

ACCT 441 - Accounting for Government and Nonprofit Organizations

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ACCT 305

Presents the views of authoritative professional organizations as to desirable standards of accounting and reporting for governmental and nonprofit entities. Topics include budgeting and budgetary accounts, accounting for various funds, the general fixed assets group of accounts, the financial reporting process, and application of the principles of fund accounting in specific areas.

ACCT 461 - Accounting Systems

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ACCT 305, ACCT 311, IFMG 300

A study of concepts, principles, and procedures of accounting system design, installation, implementation, auditing, and maintenance in relating to system objectives, information requirements, constraints, system elements, and considerations on a computerized basis.

ACCT 482 - Independent Study

Class Hours: var

Lab/Discussion: 1

Credits: 3

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

Students, with interest in independent study of a topic not offered in the curriculum may propose a plan of study in conjunction with a faculty member. Approval is based on academic appropriateness and availability of resources.

ACCT 493 - Internship in Accounting

Class Hours: var

Lab/Discussion: 3

Credits: 6

Prerequisite: Approval of the Eberly College of Business and Information Technology internship coordinator, department chairperson, and dean. Must have completed a minimum of 90cr (18cr in ACCT) with a cumulative GPA of 2.75 and 3.00 GPA within the major.

A supervised learning experience that integrates the student's academic background with practical experience related to the students' major area of interest. The number of credits earned depends on the nature of the job and the amount of time involved in the internship.

Adult and Community Education

ACE 103 - Digital Instructional Technology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces the ever-changing world of instructional technology. Exposes learners to technologies used by educators in delivery, management, instruction, and assessment. Emphasizes the use of technology tools to engage and support learners. Introduces a cloud-based information repository, which is a subscription for purchase required by the College of Education and Communications of IUP education majors.

(Offered as COMM 103 before 2017-18.)

Advising and Testing

ADVT 170 - Career Exploration

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Introduces the theoretical and practical framework with which to explore careers compatible with overall academic skills, aptitudes, and life goals. Students examine the world of work, assess their interests and abilities, and make realistic decisions on academic majors and careers. (1) Certain sections of this course will be restricted to specific enrollment groups. (2) Cross-listed as DVST 170. These courses may be substituted for each other and be used interchangeably for D/F repeats but may not be counted for duplicate credit.

Anthropology

ANTH 110 - Contemporary Anthropology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

An introduction to the discipline of anthropology: the study of human beings through time and across cultures. This class is organized around select themes that allow students to explore the nature and relevance of anthropological methods, theories, and perspectives. These themes may include, but are not limited to, human origins, evolution and human behavior, gender roles, the links between environment and culture, and social stratification. A strong emphasis on the effects of globalization on human cultures, and the potential for anthropology research to address contemporary issues such as cultural and environmental sustainability, public health, and social equity.

ANTH 211 - Cultural Anthropology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces the major concepts, theories, and research methods of cultural anthropology that are used to study and understand human culture in different parts of the world. An emphasis given to how traditional and nontraditional cultures undergo change as a result of globalization, and how cultural anthropologists study the social, economic, and political consequences that result from integration into an expanding and changing global economy. Topics covered may include, but are not limited to, social organization, economics, power and politics, race and ethnicity, language and communication, technology, religion and ritual, and sex and gender. A wide geographic coverage provides a basis for global comparisons of cultural similarities and differences among human societies.

ANTH 213 - World Archaeology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Archaeology is the study of past cultures and societies through their material remains. Explores the archaeologies of Western and non-Western societies and examines theory, methods, and techniques for investigating, reconstructing, interpreting, preserving, and learning from the past. Examines human cultural chronology from the appearance of human ancestors to the present through an examination of important social, economic, and ideological questions, as well as artifact remains. Includes the origins of food production, social inequality, and civilization.

ANTH 222 - Biological Anthropology

Class Hours: 3
Lab/Discussion: 0
Credits: 3

An introduction to the goals and techniques of biological anthropology with an emphasis on primatology, paleoanthropology, genetics, and osteology. Provides a basis for evaluating the role of biology in human behavior.

ANTH 233 - Language and Culture

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Focuses on social and cultural functions of language. Particular emphasis given to problems in anthropology with respect to non-Western languages.

ANTH 240 - Introduction to Global Health

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Explores the interdisciplinary study of global health and its relevance in our age of globalization as local medical systems are transformed by international integration. Defines the scope of global health and explores the methods of the subfield by utilizing ethnographic, theoretical, anthropological, and sociological readings to critically analyze the various factors that have contributed to the development of this global system. Investigates the relationship between culture and disease, different reproductive health practices, medical ethics, environmental factors in health, and social health disparities. Extends critical analysis to existing health systems across the globe and seeks ways for a positive role in supporting healthy individuals and communities.

ANTH 244 - Basic Archaeology

Class Hours: 3
Lab/Discussion: 0
Credits: 3

An introduction to the goals and methods of anthropological archaeology, with particular attention to the analysis of cultural chronology, past lifeways, and cultural process. Provides laboratory experience with artifacts and other archaeological data.

ANTH 250 - Human Origins

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Offers a detailed and critical review of what has been learned to date about the origin and evolution of human morphology and behavior. Introduces students to the many human-like species ("hominins") that preceded the emergence of our own species (*Homo sapiens*), and examines the range of methods used by scientists to study human evolution. It also addresses a number of relevant and controversial issues, such as what it means to be "human," the extent and nature of present-day human variation, and whether *Homo sapiens* are still evolving.

ANTH 271 - Cultural Area Studies: Africa

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Critically evaluates media headlines about African issues and reaches beyond these headlines to appreciate the complexity and diversity of people's

lives in sub-Saharan Africa and the diaspora. Course readings, assignments, and ethnographic films explore the nature of anthropology research in Africa, the impact of colonialism on social and political life, and the contemporary struggles of people to define their place in local, national, and global communities. Readings include ethnographic, historical, and popular accounts, as well as selections by African writers on issues of contemporary society, such as wildlife conservation, resource extraction, post-conflict development, food aid, and refugee relief and resettlement.

ANTH 272 - Culture Area: China

Class Hours: 3

Lab/Discussion: 0

Credits: 3

A broad introduction to Chinese culture and society from an anthropological perspective. Following an overview of China's geography and history, the course covers a range of topics pertaining to Chinese traditional culture, including marriage, family, education, governance, gender, religion, language, health, art, and music. Relies on cross-cultural comparisons to help locate Chinese culture and customs within a broader worldwide context. Also encourages students to consider the transformation (rather than elimination) of traditional cultural elements as globalization has come to play an increasingly important role in China's social and economic development.

ANTH 274 - Cultural Area Studies: Latin America

Class Hours: 3

Lab/Discussion: 0

Credits: 3

An overview of the diverse societies of Latin America from the perspectives of anthropology and Latin American studies. Through a historical, cross-cultural, and comparative approach, it explores the cultural, economic, political, and social life in many societies of this large and diverse region and transnational nature of many of these societies as a result of globalization. Themes covered are: race, ethnicity, and gender as they appear in Latin America, political and economic processes, rural underdevelopment and urbanization, transnational movement and cultures, religion, and indigenous social movements.

ANTH 310 - Voyages of Discovery

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Focuses on human diasporas through key explorations and explorers, spanning the period from 40,000 years ago to the late 19th century and touching on every inhabited continent. Through these voyages of discovery, it addresses the diffusion of ideas, the migration of peoples, technological development and its role in culture change, and the historical and cultural circumstances involved in geographic expansion. Cultures from across the globe and throughout time are discussed in terms of their expansion and their responses to the expansion of other cultures. Discusses the historical roots of globalism and its archaeologically visible results.

ANTH 314 - Contemporary Native American Cultures

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces Native American cultures of North America north of Mexico from an anthropological perspective with an emphasis on historical and contemporary cultural diversity. Emphasizes the history of culture change and continuity as well as current political, economic, and cultural issues among the Native nations of the United States and Canada.

ANTH 315 - North American Archaeology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ANTH 110 or ANTH 244 or instructor permission

A survey of North American prehistory with an emphasis on cultural ecology and technology. Attention is given to all geographic areas north of Mexico, but the focus is on the Eastern Woodlands.

ANTH 316 - Anthropology of Religion

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ANTH 110 or ANTH 211

Explores nature, function, and universal characteristics of religion in human society by utilizing cross-cultural approach. Theories concerning religious phenomena serve as topics for discussion.

ANTH 318 - Museum Methods

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ANTH 110 or ANTH 211 or ANTH 244

Lecture and laboratory course surveying the role of museums as social and educational institutions, types of museums, museum administration, and museum architecture. Procedures for collection, curation, preservation, and storage of anthropological and natural history specimens examined.

ANTH 320 - Archaeological Field School

Class Hours: var

Credits: 6

An introduction to archaeological survey, field excavation, and laboratory processing. Field school students participate in one or more of the ongoing research projects of the IUP archaeology program.

ANTH 323 - Mesoamerican Archaeology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

An introduction to the archaeology of Mesoamerica, which explores the natural and cultural diversity of the area south of the United States and north of lower Central America. Surveys the history of archaeological research in Mesoamerica and examines some of the specific methods of archaeological research that are unique to Mesoamerican archaeology. The focus is on three areas: the Gulf Coast and the Olmecs, the Valley of Mexico and its long history of settlement from the Tehuacan Valley through the Aztecs, and the southern Highlands and Lowlands inhabited by the Maya, although other regions of Mesoamerica are also discussed.

ANTH 325 - Archaeological Lab Methods

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ANTH 244

A hands-on introduction to the study of artifacts and other cultural materials recovered from archaeological excavations. Experience the specific

methods of analysis in archaeological lab settings, focusing on the analysis of stone artifacts, pre-Columbian ceramics, and historic artifacts. Analytic techniques include classification, quantification of attributes, and reporting of the results of the analyses.

ANTH 333 - The Archaeology of Early China

Class Hours: 3

Lab/Discussion: 0

Credits: 3

An overview of the history, practice, and achievements of archaeology in China, with a focus on early China (up to the Han dynasty). A portion of the course is devoted to those discoveries that have shed light on important developments in China, including its early stone age occupation, the growth of agriculture, the emergence of civilization, as well as the construction of impressive structures (such as the Great Wall and the first emperor's terracotta army). Also discusses the ways in which Chinese and Western archaeology differ, as well as the role which nationalism and regionalism have played in archaeological research and interpretation in China.

ANTH 350 - Anthropology of Gender

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Explores the primary category of social difference into which humans are universally socialized, which is the gendered nature of women's and men's experiences in the world from an anthropological perspective. An introduction to cross-cultural experiences of gender, and the social constructions of gender. Readings focus on the intersection of race, class, sexuality, and gender, and the impact on gender of technology, colonization, globalization, and the nation-state. Considers the experiences of men and women around the world from various frameworks, including reproductive, social, economic, post-colonial, and post-structural.

ANTH 352 - The Anthropology of Human Rights

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Engages the concept of human rights as applied to situations in the contemporary world. Takes an interdisciplinary approach, with an emphasis on anthropology to examine the following principal questions: (1) What are the historical origins of contemporary ideas about human rights? (2) What are some of the foremost human rights situations in the world today? (3) What are the political, economic, and cultural contexts in which human rights abuses occur? (4) What is the role of the committed (i.e., activist) anthropologist? Focuses on the interplay between the abuse of human rights, power, and culturally constructed difference, such as ethnicity and gender. Extends contemporary interpretations to existing social and political problems around the world to seek ways in which anthropologists can have a positive role to play in finding solutions to those problems.

ANTH 365 - Native North American Religions

Class Hours: 3

Lab/Discussion: 0

Credits: 3

An introduction to the indigenous religions of North America and to the peoples who practice these rich and varied approaches to the sacred. Not only examines major religious themes and dimensions (myth, ritual, ethics, etc.), but includes a historical perspective on Native North American lifeways. This perspective involves discussion of the clash with Euro-American values and contemporary native religious responses to social crisis and change. (Also offered as RLST 365; may not be taken for duplicate credit.)

ANTH 370 - Latinos and Diasporas

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces students to the global and local dimensions of the changing Latino communities in the United States and examines the communities' multiple connections and dynamic interactions with Latin American diasporas. Toward this end, the course covers (1) theories on transnational communities, diasporas, the state, and citizenship; (2) Latino cultures and geography; (3) Latin American immigration and labor migration to the United States; and (4) the impact of Latin American diasporic networks on Latino and non-Latino communities. (Cross-listed as LAS 370.)

ANTH 413 - Archaeology of Coasts

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Explores the interaction between coastal environments and humans through examination of the archaeological record. Identifies coastal modifications by humans based on the archaeological record. Explores the processes that lead to the destruction or preservation of archaeological resources related to changing sea level. Provides the student the ability to examine the archeological record to understand the interactions between coastal environments, humans, and changing sea levels over the past 15,000 years.

ANTH 415 - Cultural Resource Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ANTH 244 or instructor permission

Provides an understanding of how cultural resources are being preserved and managed under current American laws and regulations with particular emphasis on historic properties, such as historic buildings and archaeological sites. Case studies and field trips are incorporated so that students gain a thorough understanding of key problems and issues in historic preservation and cultural resource management.

ANTH 420 - Environmental Anthropology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ANTH 110 or ANTH 211

Introduces environmental anthropology, the study of the relationship between the natural environment and human social and cultural life. Illustrates the importance of understanding human-environment interactions in studying contemporary issues in global development, and in investigating the past. Explores major analytical and methodological approaches in environmental anthropology, including ecological anthropology, ethnoecology, political ecology, and environmental justice. (Titled Cultural Geography before 2016-17.)

ANTH 425 - Archaeological Theory and Research Design

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ANTH 244

Reviews the broad range of field, analytical, and interpretive methods adopted by archaeologists over the past century and guides students through the design and implementation of a research project of their own. Discussed against the backdrop of the discipline's constantly shifting theoretical setting, this survey also prepares students for the task of critically assessing published research conducted by other archaeologists and locating such research within this dynamic theoretical landscape.

ANTH 430 - Anthropology of Food

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Focuses on the influences of biology, culture, political economy, and history on what and how peoples of the world eat. Readings, lectures, films, and projects link the dietary implications of foraging, crop domestication, state formation, and industrial capitalism to food choices and health. Examines various sociocultural practices relating to the uses of food in marking social difference, maintaining social relationships, and dealing with cultural constructions of health, illness, and the body. Considers the influence of the agricultural revolution, colonization, and globalization on the transformation of food meanings, practices, and availability.

ANTH 444 - Medical Anthropology

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: ANTH 110, ANTH 211, SOC 151 or SOC 161 or permission

Focuses on the study of human confrontation with disease and illness and on the adaptive arrangements made by various human groups for dealing with these dangers. Health and disease are viewed from a broad array of micro and macro perspectives, e.g., evolutionary, ecological, and psychosocial. For nursing and social work students as well as social and biological science students.

ANTH 450 - Health Disparities

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: SOC 151 or ANTH 211 or with instructor permission

Explores health status and healthcare disparities across groups based on race/ethnicity, gender, socioeconomic status/social class, nativity, refugee and citizen status, and other cultural and demographic characteristics. Uses a social determinants of health perspective to consider how social, cultural, environmental, political, and economic conditions produce unequal and inequitable health outcomes, with special focus on disadvantaged populations. Addresses agency and empowerment of populations seeking and accessing health and health care. Includes different levels of public health interventions that can improve health outcomes, better calibrate access to health care, and improve health equity within populations. (Also offered as SOC 450; may not be taken for duplicate credit.)

ANTH 456 - Ethnographic Research Methods

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: 9cr in ANTH

Provides a background in qualitative and quantitative techniques used in anthropological research. Concentrates on the ethics of research with people, formulation of hypotheses, design and use of appropriate research techniques, and data analysis. Emphasizes development of field notes, interviewing techniques, developing genealogies, and participant observation.

ANTH 457 - Applied Anthropology

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Applied anthropology focuses on the anthropologist as an agent of social change and bridges the gap between theories of cultural behavior and the policies that affect contemporary cultures. Examines the historical role of anthropologists in early public administration and then examines at length the work of contemporary applied anthropologists in programs of international economic development (health, agriculture, and education), in domestic human service planning and delivery, in cultural resource preservation, and in their role as advocates for unempowered minorities.

ANTH 460 - Ethnographic Field School

Class Hours: 6

Lab/Discussion: 0

Credits: 6

Prerequisite: ANTH 456 or instructor permission

Ethnographic research training in the field. Emphasizes the application of qualitative research methods, the recording of data in research journals and the maintaining of field diaries, the categorizing and organizing of data, and the writing of research reports.

ANTH 470 - Environmental Archaeology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ANTH 244 or GEOS 201 or permission of the instructor

Explores past human interactions with the natural environment, including plants, animals, climate, and geologic landscapes. Incorporates hands-on practice in the scientific techniques used to reconstruct ancient environments, including analysis of pollen, sediments and soils, and microfauna. Uses computer software to graph and interpret data sets. Illustrates archaeological case studies designed to illustrate both how environmental conditions and natural hazards (e.g., volcanoes, tsunamis) impacted past human populations, as well as how people have altered and modified their environment through time. Examines these interactions using a diachronic and comparative perspective, from the evolution of hominins millions of years ago to the recent phenomenon of the Anthropocene.

ANTH 480 - Anthropology Seminar

Class Hours: var

Credits: 1-3

Prerequisite: 9cr in ANTH or permission

A seminar approach to the integration of the fields of anthropology. Assists the advanced student in understanding the nature of anthropology, the major theoretical issues, and the history of intellectual development.

ANTH 481 - Special Topics

Class Hours: var

Credits: 1-6

Special topics courses are offered on an experimental or temporary basis to explore topics that are not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 481 are primarily for upper-level undergraduate students.

ANTH 482 - Independent Study

Class Hours: var

Credits: 1-3

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

Approval is based on academic appropriateness and availability of resources. Students with an interest in independent study of a topic not offered in the curriculum may propose a plan of study in conjunction with a faculty member.

ANTH 483 - Honors Thesis

Class Hours: var

Credits: 1-6

Prerequisite: Admission to departmental honors program; prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

An intensive, focused study involving independent research culminating in a written thesis approved by a thesis director and two faculty readers/committee members. May be taken more than once to a maximum of 6cr.

ANTH 484 - Specialized Methods in Archaeology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

An opportunity to learn specialized techniques and approaches presently in use in archaeology. In any one semester, the course concentrates on one of a range of possible themes, including lab methods, field methods, statistical methods, computer applications, or text-based approaches. The specific topic varies but focuses on instructing in the mechanics of the selected technique, its application to real archaeological problems, and the interpretation of the results. May appeal to students from other disciplines who wish to gain applied expertise in a topic that is relevant to their own field of study. Interested students should contact the instructor to find out which topic will be taught in any one semester. May be repeated for credit under a different methods title.

ANTH 486 - Historic Artifacts

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Focuses on techniques for collecting, analyzing, and interpreting data from historic period (1500 to present) artifacts commonly found on North American archaeological sites. Analytic techniques, including classification, quantification of attributes, relating artifact patterns to human activities, and statistical interpretation are taught in a hands-on environment. Outlines the history of technology as a means to identify the age and use of artifacts. Considers that all objects occurred as a thought before they were made material and how to work backwards from the material to the thought.

ANTH 487 - Geoarchaeology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ANTH 244 or GEOS 201, or instructor permission

Surveys geological methods and techniques used to investigate archaeological research questions. Includes sedimentary and geomorphic processes affecting the formation and preservation of archaeological sites; methods of paleoenvironment and paleoclimate reconstruction, and radiometric dating techniques. Illustrates the importance for archaeologists to understand the geological processes that affect archaeological sites—before, during, and after people have been there. Understanding these processes is crucial to accurately reconstructing the dynamics of human behavior.

ANTH 488 - Geophysical Applications in Archaeology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Provides the methodological and technological knowledge to apply various geophysical systems used in archaeological investigations. These systems may include, but are not limited to, Ground-Penetrating Radar, Magnetometry, Electrical Resistivity, Conductivity, and Susceptibility.

ANTH 489 - Prehistoric Technologies of Eastern North America

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Introduces the prehistoric technologies of Eastern North America. Focuses on the material culture commonly recovered from pre-European Contact Native American archaeological sites, including stone, ceramic, bone, and native metal artifacts. Includes analytical techniques of classification, quantification, and interpretation linking artifacts to human behavior.

ANTH 490 - Applied Spatial Methods in Archaeology

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: ANTH 244 or instructor permission

Introduces methods used within archaeology to examine the spatial relationships between archaeological artifacts, features, and sites at various scales. Explores the strengths and weaknesses of various spatial methods in archaeology. Provides students with the ability to become knowledgeable consumers of these methods in future research and working environments.

ANTH 491 - Zooarchaeology

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Introduces the archaeological specialty of zooarchaeology, which is the study of human-animal interactions through the analysis of archaeological remains from archaeological sites. Explores the basics of vertebrate osteology through lectures and hands-on exercises, as well as the nature of various types of zooarchaeological interpretation such as studies of hunting and butchering practices, dietary importance, seasonality, domestication, paleopathology, and past environment.

ANTH 492 - Soil Science: Archaeological and Geoenvironmental Applications

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Introduces the ways in which archaeologists and geoscientists define, recognize, examine, and interpret soils in both the field and the laboratory. Examines (1) how the interactions of landform, topography, climate, and biota result in patterns of soil development and the distribution of soils that we observe within the landscape; (2) the significance of soils to other disciplines, including archaeology, quaternary geology, and geoenvironmental science; and (3) how the physical, chemical, and biological properties of soils are influenced by human activities, both past and present. Includes field trips that may occur on weekends. (as GEOS 492; may not be taken for duplicate credit.)

ANTH 493 - Internship in Anthropology

Class Hours: var
Credits: 3-12

Prerequisite: Instructor permission

Offers practical experience in any of the specialized fields of anthropology (physical, social-cultural, archaeology, or linguistics). Each student develops objectives in consultation with a particular departmental faculty member who is supervising the internship. Detailed field notes and a major paper based on the experience are required.

ANTH 496 - Human Osteology

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Intensive study of skeletal anatomy to facilitate identification of bones and bone fragments for archaeological and forensic purposes. Identify all bones in the human body and apply methods to determine sex, age, ancestry, and stature from skeletal remains.

ANTH 497 - Forensic Anthropology

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Critical examination and discussion of foundational and current methodological and theoretical approaches used in Forensic Anthropology.

Applied Music

APMU 101 - Piano I

Class Hours: var
Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 102 - Organ I

Class Hours: var
Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 105 - Voice I

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 106 - Violin I

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 107 - Viola I

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 108 - Cello I

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 109 - String Bass I

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 110 - Flute I

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 111 - Clarinet I

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 112 - Oboe I

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 113 - Bassoon I

Class Hours: var
Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 114 - Saxophone I

Class Hours: var
Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 115 - Trumpet I

Class Hours: var
Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 116 - French Horn I

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 117 - Trombone I

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 118 - Euphonium I

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 119 - Tuba I

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 120 - Percussion I

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 121 - Guitar I

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 125 - Composition I

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 126 - Piano Proficiency Level I

Class Hours: 0

Lab/Discussion: 0

Credits: 0

Corequisite: MUSC 154 or APMU 151

Adjudicates the performance of students in piano (on a pass/fail basis) as partial fulfillment of the requirements for the BA, BFA, and BSEd music degree programs. In order to pass the Level I jury, students are expected to attain a basic level of piano proficiency. (Offered as APMU 124 before 2016-17.)

APMU 127 - Piano Proficiency Level II

Class Hours: 0

Lab/Discussion: 0

Credits: 0

Corequisite: APMU 251

Adjudicates the performance of students in piano (on a pass/fail basis) as partial fulfillment of the requirements for the BSEd—Music program. In order to pass the Level II jury, students are expected to attain an intermediate level of piano proficiency. (Offered as APMU 123 before 2016-17.)

APMU 151 - Piano II

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 152 - Organ II

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 155 - Voice II

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 156 - Violin II

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 157 - Viola II

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 158 - Cello II

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 159 - String Bass II

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 160 - Flute II

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 161 - Clarinet II

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 162 - Oboe II

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 163 - Bassoon II

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 164 - Saxophone II

Class Hours: var
Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 165 - Trumpet II

Class Hours: var
Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 166 - French Horn II

Class Hours: var
Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 167 - Trombone II

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 168 - Euphonium II

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 169 - Tuba II

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 170 - Percussion II

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 171 - Guitar II

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 201 - Piano III

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 202 - Organ III

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 203 - Harpsichord III

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 205 - Voice II

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 206 - Violin III

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 207 - Viola III

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 208 - Cello III

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 209 - String Bass III

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 210 - Flute III

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 211 - Clarinet III

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 212 - Oboe III

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 213 - Bassoon III

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 214 - Saxophone III

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 215 - Trumpet III

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 216 - French Horn III

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 217 - Trombone III

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 218 - Euphonium III

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 219 - Tuba III

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 220 - Percussion III

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 221 - Guitar III

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 225 - Composition II

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 227 - Capstone Jury: Secondary Instrument

Class Hours: 0

Lab/Discussion: 0

Credits: 0

Prerequisite: Must be taken during the fourth semester of APMU Applied Music (secondary instrument)

Adjudicates the performance of students in a secondary performance area (on a pass/fail basis). To pass the secondary jury, students are expected to perform at a functional level. All students who undertake four semesters of secondary applied study must complete a capstone jury, but those in the BSEd—Music program with a voice concentration take APMU 127 in lieu of 227.

APMU 251 - Piano IV

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-

hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 252 - Organ IV

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 255 - Voice III

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 256 - Violin IV

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 257 - Viola IV

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 258 - Cello IV

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 259 - String Bass IV

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 260 - Flute IV

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 261 - Clarinet IV

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 262 - Oboe IV

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 263 - Bassoon IV

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 264 - Saxophone IV

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 265 - Trumpet IV

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 266 - French Horn IV

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 267 - Trombone IV

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 268 - Euphonium IV

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 269 - Tuba IV

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 270 - Percussion IV

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 271 - Guitar IV

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 301 - Piano V

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 302 - Organ V

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 305 - Voice IV

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 306 - Violin V

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 307 - Viola V

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 308 - Cello V

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 309 - String Bass V

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 310 - Flute V

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 311 - Clarinet V

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 312 - Oboe V

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 313 - Bassoon V

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 314 - Saxophone V

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 315 - Trumpet V

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 316 - French Horn V

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 317 - Trombone V

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 318 - Euphonium V

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 319 - Tuba V

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 320 - Percussion V

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 321 - Guitar V

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 325 - Composition III

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 351 - Piano VI

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 352 - Organ VI

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 355 - Voice VI

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 356 - Violin VI

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 357 - Viola VI

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 358 - Cello VI

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 359 - String Bass VI

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 360 - Flute VI

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 361 - Clarinet VI

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 362 - Oboe VI

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 363 - Bassoon VI

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 364 - Saxophone VI

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 365 - Trumpet VI

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 366 - French Horn VI

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 367 - Trombone VI

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 368 - Euphonium VI

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 369 - Tuba VI

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 370 - Percussion VI

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 371 - Guitar VI

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 401 - Piano VII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 402 - Organ VII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 405 - Voice VII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 406 - Violin VII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 407 - Viola VII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 408 - Cello VII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 409 - String Bass VII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 410 - Flute VII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 411 - Clarinet VII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 412 - Oboe VII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 413 - Bassoon VII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 414 - Saxophone VII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 415 - Trumpet VII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 416 - French Horn VII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 417 - Trombone VII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 418 - Euphonium VII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 419 - Tuba VII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 420 - Percussion VII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 421 - Guitar VII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 425 - Composition IV

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 427 - Capstone Jury: Primary Instrument

Class Hours: 0

Lab/Discussion: 0

Credits: 0

Prerequisite: Must be taken during the final semester of APMU Applied Music (primary instrument) required by program
Adjudicates the performance of students in their respective primary performance area (on a pass/fail basis) as partial fulfillment of the requirements for the BA, BFA, and BSEd music degree programs. To pass the primary jury, students are expected to perform at a professional level. (Offered as APMU 122 before 2016-17.)

APMU 451 - Piano VIII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 452 - Organ VIII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-

hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 455 - Voice VIII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 456 - Violin VIII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 457 - Viola VIII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 459 - String Bass VIII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 460 - Flute VIII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 461 - Clarinet VIII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 462 - Oboe VIII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 464 - Saxophone VIII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 465 - Trumpet VIII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 466 - French Horn VIII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 467 - Trombone VIII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 468 - Euphonium VIII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 469 - Tuba VIII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 470 - Percussion VIII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 471 - Guitar VIII

Class Hours: var

Credits: 1

Prerequisite:

(Major Area) Prerequisites for initial semester of study: Audition and acceptance to the area of concentration

(Minor Area) Prerequisites for initial semester of study: Audition and placement Prerequisite for subsequent semesters: Grade of "C" or better in the previous semester of study

(Major Area) Private instrumental, vocal, or composition instruction for music majors in their primary area of concentration for up to eight semesters (four in composition). Includes technical studies, musical repertoire, and performance experiences at the professional level. Weekly half-hour lessons are given (2cr) for students enrolled in the BS and BA degree programs. Weekly one-hour lessons (4cr) are given for students enrolled in the BFA degree program only.

(Minor Area) Private instrumental or vocal instruction for music minors, or for music majors in their secondary or tertiary area of concentration for up to four semesters. Includes technical studies, musical repertoire, and performance experiences at a functional level. Students enroll for 1 credit and are given weekly half-hour lessons. Students may enroll in Levels I-IV only from the following list.

APMU 480 - Wind and Percussion Pedagogy

Class Hours: 2

Lab/Discussion: 0

Credits: 2

Prerequisite: Completion of six semesters of APMU at the 4cr level; concurrent enrollment with seventh or eighth semester of APMU, or instructor permission

The study of specific techniques of, and pedagogical approaches for, woodwind, brass, or percussion instruments in both individual and classroom situations.

Art Education

ARED 101 - Introduction to Art Education

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Art Education Major or Instructor Permission

Introduces theoretical and contextual foundations that support contemporary art education theory and practice in a variety of settings including

schools, museums, and community-based programs. Serves as the first of a sequence of courses in the Art Education major and should be taken the second semester of the first year or of admission to the major. Provides a foundation for the rest of the courses in the major. Conducted in a participatory seminar format that includes selected field experiences with public P-12 schools, museums, and community art programs.

ARED 215 - Issues in Art Education

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ARED 101

An overview of issues in the field of art education. Provides students with foundational texts and theories that constitute the field of art education as it exists in schools, community-based contexts, and museums. Examines multiple populations of learners including special populations through discussion, direct instruction, and collaborative projects. Synthesizes contemporary art education as a dynamic scholarly field.

ARED 281 - Special Topics

Class Hours: var

Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 281 are offered primarily for lower-level undergraduate students.

ARED 317 - Art in K-6 Programs

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Admission to Step 1 of the 3-Step Process

Examines children's artistic development in relation to teaching art in K-6 settings. Explores types of art programs, planning, motivation, content, and evaluation of art lessons for all students in elementary art classes, including those with special needs. Students apply theories and knowledge to the design of instructional curricula, units, and lessons, as well as practice and critique the delivery of instruction.

ARED 318 - Art in 7-12 Programs

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Admission to Step 1 of the 3-Step Process

Explores a number of practical and theoretical approaches related to the teaching of studio art in 7-12 public school settings. Of primary interest is the potential for application of college-level art theories and techniques, along with exploring a variety of research writing techniques. Also provides information regarding the teaching of art with special needs populations.

ARED 320 - Art Criticism and Aesthetics in K-12 Programs

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ARED 215 (minimum C grade) and art education major

Secure the knowledge and skills necessary to teach a program of comprehensive art that includes the discipline of art criticism. Establishes theoretical

frameworks for writing intelligently and talking about art with students from a critical perspective. Also provides opportunities for developing curricular and pedagogical materials appropriate for teaching art K-12.

ARED 323 - Community-Based and Museum Art Education

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ARED 215

Examines theories, issues and practices related to art education within community-based and museum settings. Includes art and children's museums, community art programs, after school programs, public and collaborative art programs, and emerging organizations, programs, and resources. In these settings, art educators work with a diversity of learners that may include children, adults, community activists and cultural workers, as well as with a diversity of art processes and media. Examines relationships between theory and practice and collaborates with community and museum-based organizations.

ARED 423 - Community-Based and Museum Art Education

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ARED 215

Examines theories, issues and practices related to art education within community-based and museum settings. Includes art and children's museums, community art programs, after-school programs, public and collaborative art programs, and emerging organizations, programs, and resources. In these settings, art educators work with a diversity of learners that may include children, adults, community activists and cultural workers, as well as with a diversity of art processes and media. Examines relationships between theory and practice and collaborates with community and museum-based organizations.

ARED 424 - Special Populations in Art Education

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ARED 215

Focuses on special populations as learners in multiple art education contexts including schools, community-based programs, and museums. Includes, but is not limited to, learners with special needs, English Language Learners, and learners across the life span. Examines Universal Design in education (UDL), therapeutic art education contexts, and curriculum design for multiple learners.

ARED 482 - Independent Study

Class Hours: var

Credits: 1-3

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

Students with interest in independent study of a topic not offered in the curriculum may propose a plan of study in conjunction with a faculty member. Approval is based on academic appropriateness and availability of resources.

Art History

ARHI 100 - Arts of the 20th Century

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Art majors and minors only

A study of art in the US during 1900-1960 in light of historical events and in the broader context of political, philosophical, religious, and social developments, including women and underrepresented groups as subjects, creators, and patrons of the arts. An introductory course for incoming art majors. Primary focus on painting, photography, and film.

ARHI 101 - Introduction to Art

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces the elements of visual expression, past and present. Students gain an understanding of the processes of art making and the motivations and goals of artists across time. Students learn how various factors, including religion, politics, and literature, affect the creation of the arts of any given period or region.

ARHI 205 - Ancient to Medieval Art

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Examines a selection of art and architectural forms from the Prehistoric period through the late Middle Ages, in relation to the political, social, economic, and religious forces that have shaped Western cultures.

ARHI 207 - Renaissance through Modern Art

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Studies art from the Renaissance through the Modern periods in western Europe in light of historical events and in the broader context of political, philosophical, religious, and social developments, including women and underrepresented groups as subjects, creators, and patrons of the arts. Issues of exoticism, Orientalism, and colonialism are discussed.

ARHI 224 - Introduction to Asian Art

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Examines a selection of art and architectural forms from China, Japan, and India, ancient and modern. Students are introduced to religious and secular sculpture, painting, and ceramics, as well as the philosophical, political, and social forces that prompted their creation.

ARHI 321 - History of World Ceramics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Analyzes the development of ceramics from its beginnings to the present. Emphasizes the historical and social context and changing aesthetics of ceramic production, with special focus on the pottery of East Asia and Islamic cultures.

ARHI 407 - Medieval Art

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Art and architecture of Europe during the Middle Ages, beginning with early Christian and Byzantine and concluding with the Gothic period. Dual listed for graduate credit as ARHI 507.

ARHI 408 - Italian Renaissance Art

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Italian art from 1400s through 1650 and Mannerist movement. Special attention paid to great masters of the period. Dual listed for graduate credit as ARHI 508.

ARHI 409 - Baroque and Rococo Art

Class Hours: 3
Lab/Discussion: 0
Credits: 3

A general survey of art from 1575 to 1775, includes architecture, sculpture, painting, and other arts. Dual listed for graduate credit as ARHI 509.

ARHI 410 - 19th-Century European Painting

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Junior standing or instructor permission

Surveys the history of Western painting from the late 18th century to the turn of the 20th. The styles and movements covered range from neo-classicism to romanticism, realism, the Pre-Raphaelite painters, impressionism, symbolism, and post-impressionism. French painting is most heavily represented. Activities include lecture mixed with discussion of readings, debates about issues, practice in "reading" images, and others.

ARHI 411 - 20th-Century European Art

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Studies 20th-century painting, sculpture, photography, and film in France, Germany, and Italy in light of historical events and in the broader context of political, philosophical, religious, and social developments, including women and underrepresented groups as subjects, creators, and patrons of the arts.

ARHI 412 - Classical Art

Class Hours: 3
Lab/Discussion: 0
Credits: 3

A historical survey of the architecture, painting, sculpture, and minor arts of the classical period of Greece and Rome, including the Minoan, Mycenaean, and Etruscan cultures.

ARHI 413 - Senior Seminar

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Helps students develop adequate vocabularies and methods to be used in discussion and criticism of works of art.

ARHI 417 - Byzantine Art

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: ARHI 205 or instructor permission

Investigates the art and architecture produced in the Byzantine Empire, with a concentration on the years between 324, the year Constantine founded Constantinople, and 1453, the date the Turks conquered the city. Consisting of lectures, discussions, videos, and field trips, the course emphasizes cross-cultural contacts between Byzantium, Islam, and the West.

ARHI 420 - Art Museums, Art Libraries, and Visual Resources

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: ARHI 100, ARHI 101, or instructor permission

Explores and introduces professions in art museums, art libraries, and visual resources. Includes a brief history of art collecting and an introduction to the major art museums in the United States, including their origins and current status. Presents past and contemporary art practices in museums and special collection environments, including the essential functions of art libraries, visual resources collections, and curatorial practices. Covers current challenges and controversies facing art museums and collections. Provides relevant practical experiences including field trips and guest lectures.

ARHI 423 - Art of Japan

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Introduces the history and aesthetics of Japanese art, from antiquity to the present. Lectures focus on major works of painting, sculpture, architecture, prints, ceramics, and other works from antiquity to present. Close attention is paid to their historical contexts and underlying themes. These include religious influences, the imperial court, the tea ceremony, and modern life. The interaction of Japan with its neighbors is also considered.

ARHI 424 - Art of India and Southeast Asia

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Analyzes the arts of India and Southeast Asia, past and present. Examines representative examples from major periods, emphasizing the cultural, political, and/or religious context of the work.

ARHI 425 - Arts of China

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Surveys art selected from the five millennia of Chinese art and culture. Examines sculpture, architecture, and painting from the Neolithic period through the 20th century. Issues of religion, patronage, and popular culture are included.

ARHI 427 - Japanese Narrative Art

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Introduces the Japanese tradition of presenting narratives pictorially. Works considered include historical and fictional stories imaged in screens and scrolls, as well as modern and contemporary films which continue this visual idiom.

ARHI 481 - Special Topics

Class Hours: var
Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 481 are primarily for upper-level undergraduate students.

ARHI 493 - Internship

Class Hours: var
Credits: 3-12

For art history majors who wish to receive practical experience working within professional situations that relate to the student's artistic and occupational goals.

Art (Studio)

ART 111 - Figure Drawing

Class Hours: 0
Lab/Discussion: 6
Credits: 3

A foundation course in drawing, including a study of the structure of drawing and composition with a variety of media and subject matter.

ART 112 - Fundamentals of Drawing

Class Hours: 0
Lab/Discussion: 6
Credits: 3

Seeks to integrate basic principles and fundamentals of drawing and design.

ART 113 - Three-Dimensional Design

Class Hours: 0
Lab/Discussion: 6
Credits: 3

Basic elements and principles of design are studied. A course in design in three dimensions.

ART 114 - Color and Two-Dimensional Design

Class Hours: 0

Lab/Discussion: 6

Credits: 3

Focuses on the consistent properties of color and the manner in which two-dimensional design can be organized. Specific attention is given to the complex interactions of color within two-dimensional design.

ART 211 - Painting

Class Hours: 0

Lab/Discussion: 6

Credits: 3

An introduction to painting in which a variety of materials, techniques, and approaches are explored.

ART 213 - Woodworking: Function and Form

Class Hours: 0

Lab/Discussion: 6

Credits: 3

Involves the study of woodworking and furniture design as it relates to the individual designer-artist. Students experience a formal background in both woodworking technique and the application of design.

ART 214 - Ceramics

Class Hours: 3

Lab/Discussion: 3

Credits: 3

Introduces the processes, techniques, and aesthetics of the ceramics medium with an examination of historical and contemporary approaches. Emphasis is placed on basic hand building methods and techniques.

ART 215 - Sculpture

Class Hours: 0

Lab/Discussion: 6

Credits: 3

An introduction to sculpture with an emphasis on study of form as well as visualizing in the third dimension.

ART 216 - Jewelry and Metals

Class Hours: 0

Lab/Discussion: 6

Credits: 3

Prerequisite: ART 113 or instructor permission

An introduction to jewelry and metals with an emphasis on the design and creation of functional and nonfunctional art objects. Basic processes of metal fabrication is the focus.

ART 217 - Print Media

Class Hours: 0
Lab/Discussion: 6
Credits: 3

An introduction to basic techniques of print media including planographic, relief, and electronic processes.

ART 218 - Introduction to Graphic Design

Class Hours: 0
Lab/Discussion: 6
Credits: 3

Prerequisite: ART 112, ART 114

A survey of graphic design, exploring creative problem-solving techniques. Introduces the importance of concept development, aesthetics, symbolism, typography, and computer method. Studio experience provides a wide range of experiences for the beginning graphic design student. Projects, problems, and exercises will deal with skills, principles, application, and theory.

ART 221 - Principles of Illustration

Class Hours: 0
Lab/Discussion: 6
Credits: 3

Prerequisite: ART 218

Introduces essential processes and techniques used in illustration. Emphasizes the artist's role in critically interpreting and enhancing textual information.

ART 281 - Special Topics

Class Hours: var
Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 281 are offered primarily for lower-level undergraduate students.

ART 355 - Intermediate Graphic Design and Illustration

Class Hours: 0
Lab/Discussion: 6
Credits: 3

Prerequisite: ART 218

An intermediate-level study in graphic design focusing on digital illustration, complex typography, and publication design. Studio experience focuses on current professional 2D digital illustration software.

ART 356 - Intermediate Graphic Design II

Class Hours: 0
Lab/Discussion: 6
Credits: 3

Prerequisite: ART 218 Recommended ART 355

An intermediate-level study in graphic design, researching publication design, grid systems, and multipage design. Studio experience will focus on current professional software used for publication design.

ART 356 - Intermediate Layout and Composition for Print and Interactive Media

Class Hours: 0

Lab/Discussion: 6

Credits: 3

Prerequisite: ART 218; ART 355 (recommended)

An intermediate level study in graphic design, researching publication and web layout, grid systems, and multipage design on both the printed page and in interactive media. Studio experience focuses on current professional software used for publication design.

ART 400 - Professional Practices

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: BFA or BA studio majors only, senior status

Professional practices for the visual artist. Major issues may include the development of a thesis exhibition, résumé development, an artist's professional image, portfolio development, marketing skills, career opportunities, and grant writing.

ART 421 - Advanced Drawing

Class Hours: 0

Lab/Discussion: 6

Credits: 3

Prerequisite: ART 111, ART 112

Meets the needs of the student who has some background in the field. Problems of composition, two- and three-dimensional relationships, and surface are on an individual basis.

ART 423 - Drawing: Materials and Process

Class Hours: 0

Lab/Discussion: 6

Credits: 3

Prerequisite: ART 112

Investigates essential materials and processes used in contemporary drawing (course is repeatable up to 9 credits).

ART 424 - Drawing: Ideation and Concept

Class Hours: 0

Lab/Discussion: 6

Credits: 3

Prerequisite: ART 112

Investigates ideational and conceptual skills utilized in contemporary drawing and design (course is repeatable for up to 9 credits).

ART 425 - Critical Practice

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Junior, senior, or graduate status; art majors only

Assists advanced students to acquire art criticism concepts and skills. Through written discourse, students engage in both the discourse of art making and contemporary theories.

ART 448 - Brand Design

Class Hours: 1.5

Lab/Discussion: 2

Credits: 3

Prerequisite: ART 214

An integrated study of branding concepts in marketing and art including aesthetics in commercial art, design of brand and corporate identity trademarks, theories of brand marketing and business strategy, customer touchpoints in brand communication, and branding as a corporate strategy. (Also offered as MKTG 448; may not be taken for duplicate credit.)

ART 451 - Advanced Woodworking: Function and Form

Class Hours: 0

Lab/Discussion: 6

Credits: 3

Prerequisite: ART 213

Offers advanced training and skills involving the study of contemporary furniture design and woodworking. Emphasizes a technical and aesthetic point of view.

ART 452 - Advanced Ceramics

Class Hours: 0

Lab/Discussion: 6

Credits: 3

Prerequisite: ART 214

Continued exploration of the field of ceramic production, along with kiln firing and glaze formulation.

ART 453 - Advanced Sculpture

Class Hours: 0

Lab/Discussion: 6

Credits: 3

Prerequisite: ART 215

An opportunity to pursue independent study in sculpture. Materials and processes are individually chosen and the work related to broadening concepts.

ART 454 - Advanced Painting

Class Hours: 0

Lab/Discussion: 6

Credits: 3

Prerequisite: ART 211

Individual experimentation and exploration by the painter and investigation of the various technical approaches.

ART 455 - Modeling and Animation

Class Hours: var
Credits: 3-6

Prerequisite: ART 218, ART 355 instructor permission required for 6cr studio Recommended ART 356
Introduces three-dimensional modeling and rendering for illustration and animation. Studio experience focuses on current professional 3-D software.

ART 456 - Advanced Web and Interactive Design

Class Hours: var
Credits: 3-6

Prerequisite: ART 218, ART 355; instructor permission required for 6cr studio; Recommended ART 356, ART 455
An exploration of web page and interactive design. Studio experience focuses on current professional web and interactive software.

ART 457 - Advanced Print Media

Class Hours: var
Credits: 3-6

Prerequisite: ART 217, permission required for 6cr studio
Student elects to study a print media process or processes in greater depth and works toward developing personal visual language and techniques ranging from the traditional to the nontraditional.

ART 460 - Advanced Jewelry and Metals

Class Hours: 0
Lab/Discussion: 6
Credits: 3

Prerequisite: ART 216 or permission
Technical expertise is further developed to challenge each individual to understand the relationship of concept to the completed object, whether it is jewelry, hollowware, or a nonfunctional object. Various techniques are investigated in pursuit of a personal expression and aesthetic. May be repeated for credit.

ART 481 - Special Topics

Class Hours: var
Credits: 1-3

May provide an in-depth study of a narrowly defined area of the discipline. Subject matter may change with repeated offering of the course. May be repeated for credit.

ART 482 - Independent Study

Class Hours: var
Credits: 1-3

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost
Students with interest in independent study of a topic not offered in the curriculum may propose a plan of study in conjunction with a faculty member. Approval is based on academic appropriateness and availability of resources.

ART 493 - Internship

Class Hours: var
Credits: 3-12

For art majors who wish to receive practical experience working within professional situations that relate to the student's artistic and occupational goals.

Asian Studies

ASIA 106 - Samurai and Gongfu Heroes: Masculinity in East Asia

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Explores what it means to be a man, from the haohan of China to the Men of High Purpose of Japan and beyond. Analyses stories, films, and official histories that have encouraged Chinese and Japanese people to emulate the great heroes of the past and how these people and their stories have been re-used in modern Asia. (Also offered as HIST 106; may not be taken for duplicate credit.)

ASIA 200 - Introduction to Asian Studies

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Introduces the study of Asian societies. Examines different regions of Asia and also different academic disciplines and how they create knowledge about Asia.

ASIA 483 - Honors Thesis

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Asian Studies minor, 3.25 cumulative GPA; 3.5 GPA in Asian Studies courses, departmental permission. Approval is based on academic appropriateness and availability of resources.

A two-semester sequence of research and writing, culminating in an honors thesis or project. Honors theses are completed individually under the direction of a professor who specializes in the student's area of interest and are approved by a thesis committee comprising the thesis director and two others. May be taken twice for a total of 6cr.

Business Communication

BCOM 321 - Business and Interpersonal Communications

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: ENGL 101, ENGL 202

A study of communication theory and principles as applied to business situations and practices; development of communication skills in areas of communication such as speaking, writing, listening, and nonverbal communicating. Emphasizes building effective interpersonal relations in a business environment. (Offered as BTST 321 before 2014-15.)

BCOM 342 - Intercultural Business Communication

Class Hours: 3
Lab/Discussion: 0

Credits: 3

Prerequisite: Junior standing

An in-depth study and theoretical understanding of intercultural business communication, including international, national, ethnic, racial, and socioeconomic cultures. Explore practices, trends, and difficulties of people primarily identified with one culture attempting to interact with people of another culture through speaking, listening, writing, and nonverbal means. Problems of intercultural communication situations for business are pinpointed, elements of the problems clarified, and guidelines projected for problem mitigation. (Offered as BTST 342 before 2014-15.)

Biochemistry

BIOC 301 - Foundations of Biochemistry

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: BIOL 202 and a grade of "C" or better in CHEM 332

A foundation in biochemical principles emphasizing the structure/function relationships of proteins, carbohydrates, nucleic acids, and lipids. Catalysis by enzymes, including reaction mechanisms, kinetics, and regulation of activity are considered in detail. The structure of biological membranes and transport of both solutes and signals across membranes are explored. Assumes an understanding of eukaryotic cell structure and organic chemistry of major functional groups.

BIOC 311 - Biochemistry Laboratory I

Class Hours: 0

Lab/Discussion: 4

Credits: 1

Prerequisite: BIOL 202, CHEM 332

A companion to BIOC 301, including experiments in photometry, enzyme kinetics and purification, lipid isolation and characterization, electron transport in respiration and photosynthesis, and use of radioisotopes.

BIOC 401 - Laboratory Methods in Biology and Biotechnology

Class Hours: 2

Lab/Discussion: 4

Credits: 3

Prerequisite: CHEM 351 or BIOC 301

Theory and practice in a number of major analytical and preparative techniques currently in use in physiology, molecular biology, and biotechnology. (Also offered as BIOL 401; may not be taken for duplicate credit.)

BIOC 402 - Advanced Biochemistry

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: BIOC 301

Examination of biochemical processes with a focus on metabolism. Central pathways considered in detail, including regulatory mechanisms and hormonal signaling. Other selected processes and integration of mammalian metabolism are explored. Assumes an understanding of concepts relating to structure/function relationships for biomolecules, biological membranes, and signaling included in BIOC 301.

BIOC 412 - Advanced Biochemistry Laboratory

Class Hours: 0
Lab/Discussion: 4
Credits: 1

Prerequisite: BIOC 311

A companion to BIOC 402, including experiments in membrane characterization, properties of amino acids, isolation and function of nucleic acids, and synthesis of proteins and nucleic acids.

BIOC 480 - Biochemistry Seminar I

Class Hours: 1
Lab/Discussion: 0
Credits: 1

Prerequisite: BIOC 402, BIOC 412

A discussion of recent trends in biochemical thought. Oral and written reports on assigned readings, and library or laboratory research. Guest lecturers. The combination BIOC 480-BIOC 490 counts as one writing-intensive course.

BIOC 481 - Special Topics in Biochemistry

Class Hours: var
Credits: 1-3

Prerequisite: BIOC 402 or CHEM 351

A lecture-discussion course of recent biochemical topics or those of unique interest. Topic and instructors to change annually.

BIOC 482 - Independent Research in Biochemistry

Class Hours: var
Credits: 1-3

Prerequisite: BIOC 402, BIOC 412, permission by program coordinator

Student conducts a research project in any area of biochemistry. Work supervised by faculty. Does not involve regular class or lab hours. Enrollment by permission only.

BIOC 490 - Biochemistry Seminar II

Class Hours: 1
Lab/Discussion: 0
Credits: 1

Prerequisite: BIOC 402, BIOC 412, BIOC 480

A discussion of recent trends in biochemical thought. Oral and written reports on assigned readings, and library or laboratory research. Guest lecturers. The combination BIOC 480-490 counts as one writing-intensive course.

Biology

BIOL 101 - Basic Biology

Class Hours: 2
Lab/Discussion: 2
Credits: 3

Deals with the principles of biology. Topics include cellular structure and physiology, growth and repair, reproduction and development, control,

sources of food energy, inheritance, and man's interrelationship with his biological environment. The classification of plants and animals is reviewed briefly. Two hours lecture and two hours laboratory.

BIOL 103 - Life on Earth

Class Hours: 3

Lab/Discussion: 2

Credits: 4

Introduces ecology, conservation, and evolutionary biology, emphasizing how ecological change caused by human activities impacts plant and animal populations, communities, and ecosystems and how living things interact with each other and the physical environment. Applies scientific method to learn fundamental concepts and explore problems in ecology and conservation.

BIOL 104 - Human Biology: How the Human Body Works

Class Hours: 3

Lab/Discussion: 2

Credits: 4

Introduces functions of the human body using disease as a mechanism. Explores the internal milieu of the body and how the different body systems affect this balance. Gain an appreciation for the human body and its interactions with the environment.

BIOL 105 - Cell Biology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces concepts and applications for understanding human biological function from the point of view of cellular biology.

BIOL 106 - Human Genetics and Health

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Demonstrates how genetics and molecular biology contribute to human health with emphasis on inherited diseases, genetic therapies, and individualized medicine. Introduces the therapeutic uses of stem cells, the genetics of cancer, and the utilization of vaccines in the treatment and prevention of human disease.

BIOL 107 - Introduction to Forensic Biology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Overviews the basic principles underlying modern applications of biology in forensic science. Explores the science of forensic biology, traditionally known as serology, and the broad scope of laboratory tests used to investigate crimes involving DNA, blood, and other body fluids. Focuses on the issues related to DNA fingerprinting as they apply to public or legal proceedings in the law enforcement arena.

BIOL 115 - Biotic Diversity of North America

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces students to the plants, animals, interactions, and functions of major North American aquatic and terrestrial biomes, and explores the impact of changes in climate, biodiversity, energy demands, and human population growth on these ecosystems.

BIOL 116 - Human Genetics and Health Laboratory

Class Hours: 0

Lab/Discussion: 2

Credits: 1

Demonstrates our broad reliance on genetics through application of molecular and genetic tools to investigate aspects of disease, inheritance, microbial/viral infection, and antibiotic resistance.

BIOL 117 - Understanding HIV Biology and AIDS

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces the mode of infection and prevention of AIDS virus which are used as an illustration of biological principles. Profiles biological indicators for HIV disease and its progression to AIDS. Emphasizes therapeutic and non-therapeutic approaches to treat HIV infections.

BIOL 118 - The History of Pain

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Describes the anatomical and physiological foundation of pain based on contemporary science. Examines the history of scientific theories and hypotheses about understanding the pain mechanism. Introduces students to the status of pain in various societies throughout the ages.

BIOL 119 - Emerging Diseases

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Provides an understanding of the biological basis of infectious diseases and the social, historical and ethical consequences of these types of afflictions. Covers background material such as the germ theory of disease and the cell theory at an introductory level. Includes specific cases of emerging or reemerging infectious diseases with emphasis on current events relating to disease outbreaks.

BIOL 123 - Perspectives in Cell and Molecular Biology

Class Hours: 1

Lab/Discussion: 0

Credits: 1

For those interested in entering the Cell and Molecular Biology Track. Introduces the latest advances in the fields of molecular biology and biotechnology, as well as the career possibilities and professional responsibilities in these fields. Aids students in clarifying career goals and introduces them to the literature of molecular biology, including electronic resources. Includes field trips that might take place on weekends.

BIOL 150 - Human Anatomy

Class Hours: 3

Lab/Discussion: 3

Credits: 4

A study of the functional and systematic anatomy of humans. Laboratory studies focus on models of human organs and systems along with a dissected human cadaver. Also includes mammals whose anatomy is then related to the human condition.

BIOL 155 - Human Physiology and Anatomy

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: Non-Biology Department majors only (nutrition, dietetics, family and consumer sciences education, health and physical education, and safety, health, and environmental applied sciences majors)

A study of structure and function of the human body. Emphasizes normal function, with particular attention to functional anatomy, control mechanisms, and interrelationships among systems. Laboratory studies include experimentation and dissection. For students with little or no science background.

BIOL 200 - Medical Terminology

Class Hours: 2

Lab/Discussion: 0

Credits: 2

Requires students to not only learn vocabulary, but also the proper pronunciation of medical terms. A class limit is requested to accommodate pedagogical approaches to developing oral pronunciation skills.

BIOL 201 - Principles of Ecology and Evolution

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: For science majors only

An introduction to ecology, including physiological and behavioral ecology, population and community ecology, and ecosystem and landscape ecology, and to evolution, including natural selection and population genetics, speciation, and phylogenetic history and systematics of life. Develops skills in the use of the scientific method. For science majors.

BIOL 202 - Principles of Cell and Molecular Biology

Class Hours: 3

Lab/Discussion: 3

Credits: 4

An introduction to the structure and function of prokaryotic and eukaryotic cells and their cellular biochemistry, with emphasis on the genetic flow of information from DNA to RNA to protein and the regulatory events, including cell-cell communication, that instruct these pathways. Develops skills in the use of the scientific method. For science majors. (Offered as BIOL 111 before 2015-16.)

BIOL 203 - Principles of Genetics and Development

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: BIOL 202

Introduces the science of genetics, with an emphasis on the basic principles of Mendelian genetics, the genetics of populations, molecular genetics, and the genetics of development. For science majors. (Offered as BIOL 263 before 2015-16.)

BIOL 205 - Ecological Methods

Class Hours: 2

Lab/Discussion: 2

Credits: 3

Prerequisite: BIOL 201; MATH 216 or MATH 217

Introduces the standard approaches for hypothesis testing in biological research, including experimental design, data collection, and data analysis. Emphasizes the analysis and interpretation of ecological data sets. Computer instruction focuses on software programs commonly used for biological data analysis.

BIOL 210 - Plant Biology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: BIOL 201

Explores the diversity, form, and function of vascular and nonvascular plants. Focuses on the evolutionary innovations that distinguish different taxonomic groups of plants. Topics include plant anatomy and physiology, growth and development, plant classification, plant ecology, and genetically modified foods. Discusses ways that plants are important to humans, ranging from food and lumber to sequestering carbon dioxide. An in-depth exploration of crop plants, including the science of biotechnology.

BIOL 211 - Investigative Biological Forensics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: BIOL 107 or equivalent

The lecture-only course examines how to collect and analyze biological evidences found on clothing, bones, insects, plants, weapons, and other surfaces to help identify victims and support criminal investigations. Covers a variety of subjects intimately linked including forensic anatomy, odontology, anthropology, pathology, entomology, botany, and environmental contamination. Presents case studies for each set of biological materials like insects, plants, bones, and fluids. Features in-depth discussion and writing.

BIOL 220 - General Zoology

Class Hours: 2

Lab/Discussion: 3

Credits: 3

Prerequisite: BIOL 201

Examines the evolution, form, and function of all major animal phyla, from sponges through chordates. Interactive lecture-laboratory sessions follow a phylogenetic approach to the animal kingdom and incorporate essentials of animal ecology, physiology, functional morphology, and behavior.

BIOL 221 - Environmental Health and Protection

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: 4cr BIOL lab course and 4cr CHEM lab course

Surveys indoor and outdoor environmental health hazards. Hazards are addressed from the standpoint of their source and nature, human health effects, measurement and control, and management.

BIOL 240 - Human Physiology

Class Hours: 3

Lab/Discussion: 2

Credits: 4

Prerequisite: BIOL 150 or BIOL 203 or KHSS 221

The study of the mechanisms, but with the human organism functions. Mechanisms covered range from the molecular/subcellular to the tissue, organ, and organism levels. Organ systems examined include the nervous, muscular, cardiovascular, respiratory, endocrine, renal, digestive, and reproductive. Emphasizes three major themes: (1) that organ functions are dependent on the underlying molecular and cellular processes, (2) that all organ systems use biological control systems to maintain organ homeostasis, and (3) that each organ function is closely controlled and dependent on the interaction/integration with functions from other organ systems. (Offered as BIOL 151 before 2015-16.)

BIOL 241 - Introductory Medical Microbiology

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: BIOL 203 or BIOL 240; CHEM 101 or CHEM 111 or CHEM 113; CHEM 102 or CHEM 112 or CHEM 114

An introduction to medical microbiology that focuses on the structure, biology, and genetics of microbes in relation to human disease and to bacteriology as well as bacterial, viral, and fungal pathogens and the mechanism of disease. Prepares student for advance study in microbiology and the health sciences. Standard methods and techniques are emphasized in laboratory. (Titled General Microbiology before 2015-16.)

BIOL 242 - Comparative Vertebrate Anatomy

Class Hours: 2

Lab/Discussion: 3

Credits: 3

Prerequisite: BIOL 220

An investigation of the comparative structure and function of the vertebrate body emphasizing the diverse solutions to the problem of design for survival and the evolutionary mechanisms that provide those solutions. Meets twice per week for 2.5 hours. Each meeting includes both lecture and laboratory experiences.

BIOL 250 - Principles of Microbiology

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: BIOL 112 or BIOL 203 or instructor permission

An introduction to microbiology focusing on the fundamental principles of microbial structure, modes of reproduction, genetics, and physiology. Emphasizes the importance of microbes in ecological, industrial, immunological, and epidemiological processes. Standard microbiological methods and techniques are emphasized in laboratory.

BIOL 261 - Ornithology

Class Hours: 2

Lab/Discussion: 3

Credits: 3

A study of birds of the region. Indoor laboratory as well as early-morning and possibly weekend field trips required.

BIOL 272 - Conservation of Plant and Animal Resources

Class Hours: 2

Lab/Discussion: 3

Credits: 3

Prerequisite: BIOL 201-BIOL 202 or BIOL 103-BIOL 104

A study of accepted practices in soil, water, forest, and wildlife conservation. Saturday field trips included.

BIOL 281 - Special Topics

Class Hours: var

Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 281 are offered primarily for lower-level undergraduate students.

BIOL 300 - Genetics in Medicine and Nutrition

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: BIOL 203 or BIOL 241 or CHEM 255

Examines how our genes play a role in disease and diet. Includes a fundamental background of genetics, as well as specific diseases that are caused by defective genes. Explores how nutrition interacts with the genome and its impact on health and disease.

BIOL 301 - Fundamentals of Epidemiology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: BIOL 104 and BIOL 119; or BIOL 203; and MATH 216 or MATH 217

Introduces epidemiologic principles, concepts, and methods used to study the distribution and determinants of diseases in populations. Includes public health and clinical applications. Covers the history of epidemiology, dynamics of disease transmission, measures of disease frequency and association, study designs, causation, and also considers ethics and public policy issues in epidemiology. (Offered as BIOL 460 before 2016-17.)

BIOL 310 - Applied Entomology and Zoonoses

Class Hours: 2

Lab/Discussion: 3

Credits: 3

Prerequisite: BIOL 201, BIOL 220

A study of the measures for abatement or control of arthropods, rodents, birds, and other disease vectors of public importance; selection, chemistry, formulation, and safe application of insecticides, rodenticides, and fumigants; pesticing equipment; application of biological and other measures of control.

BIOL 313 - Forensic Analysis of DNA

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: BIOL 203 or BIOL 211

The lecture-only course introduces the identification and assessment of biological evidence in criminal matters using DNA. Presents routinely used broad-based protocols for DNA typing, sample collection, and techniques applied in quality assurance during DNA profiling. Covers important questions about the use of DNA by criminal justice system.

BIOL 323 - Introduction to Toxicology and Risk Assessment

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: BIOL 104 or BIOL 203; CHEM 101 or CHEM 111 or CHEM 113; CHEM 102 or CHEM 112 or CHEM 114

A study of uptake, distribution, metabolism, and excretion of environmental chemicals; mechanisms of their toxicity; and their effects on major organ systems. Knowledge of these topics is applied to risk assessment procedures.

BIOL 331 - Developmental Biology

Class Hours: 2
Lab/Discussion: 3
Credits: 3

Prerequisite: BIOL 203

Studies cellular, molecular, and genetic control of embryonic and post-embryonic development. Introduces the principles of cell differentiation, stem cell behavior, and how cell fate decisions are coupled to the morphogenesis of tissues/organs. Emphasizes how the loss of developmental signaling pathways lead to the onset of human disease.

BIOL 342 - Comparative Vertebrate Anatomy

Class Hours: 2
Lab/Discussion: 3
Credits: 3

Prerequisite: BIOL 201

An investigation of the comparative structure and function of the vertebrate body emphasizing the diverse solutions to the problem of design for survival and the evolutionary mechanisms that provide those solutions. Meets twice per week for 2.5 hours. Each meeting includes both lecture and laboratory experiences.

BIOL 352 - Comparative Animal Physiology

Class Hours: 2
Lab/Discussion: 3
Credits: 3

Prerequisite: BIOL 112 or BIOL 202, CHEM 231

A comparative study of homeostatic mechanisms and systems in animals and their relation to fundamental chemical and physical events in cells.

BIOL 362 - Ecology

Class Hours: 2
Lab/Discussion: 3
Credits: 3

Prerequisite: BIOL 201

Studies the interrelations and adaptations of organisms; includes consideration of physical and biotic environmental factors. Field trips.

BIOL 364 - Immunology

Class Hours: 2

Lab/Discussion: 3

Credits: 3

Prerequisite: BIOL 241; CHEM 111 or CHEM 113; CHEM 112 or CHEM 114

Physical and chemical properties of antigens and antibodies; nature of antigen-antibody interactions; mechanism of antibody formation; and immune reaction and disease. Lab employs serological techniques.

BIOL 401 - Laboratory Methods in Biology and Biotechnology

Class Hours: 2

Lab/Discussion: 4

Credits: 3

Prerequisite: CHEM 351 or BIOC 301

Theory and practice in a number of major analytical and preparative techniques currently in use in physiology, molecular biology, and biotechnology. (Also offered as BIOC 401; may not be taken for duplicate credit.)

BIOL 402 - Advanced Human Anatomy

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: BIOL 202; not open to students who have successfully completed BIOL 150; not open to students who have completed fewer than 60cr.

An intensive study of the gross anatomical structures and their functions within the human body. Explores the organization and integration of the human body on a region-by-region basis. For each region of the body, students observe all structures within that region simultaneously. This approach allows students to appreciate the integration of different biological systems within the body. Laboratory sessions center on regional cadaver dissection by groups of students to appreciate 3-D anatomical relationships.

BIOL 405 - The Biology of the Cell - Critical Thinking

Class Hours: 2

Lab/Discussion: 0

Credits: 2

Prerequisite: BIOL 203; CHEM 231

Introduces the cellular and modular mechanism by which individual cells grow, receive, and respond to internal and external signals and move. Discusses the latest advances in the discipline; students are expected to use current literature on their own as a means of building critical-thinking skills. Emphasizes individual and group activities.

BIOL 409 - Pharmacology Principles and Applications

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: BIOL 106 or BIOL 202 or BIOL 240

Explores the principles of the interactions of chemicals with biological systems in the context of human diseases of varied etiology (e.g. genetic, environmental) and clinical presentation. Introduces the general principles of pharmacokinetics and pharmacodynamics, integrating analysis at multiple biological levels (molecular, cellular, systems, organismal) to develop a broad view of the interaction of drugs with biological systems. Develops skills in pharmacological analysis through examination of actual and simulated sets of data. Examines applications of principles to specific fields of pharmacology (e.g., neuro-, cardiovascular, immuno-, endocrine, cancer) and explores the discovery and development of new medications using examples from recent scientific and clinical trial literature.

BIOL 410 - Molecular Biology Topics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: BIOL 203 or 263 or BIOC 301 or CHEM 351

Involves the study of biological phenomena in molecular terms. Focuses on recombinant DNA principles as they relate to prokaryotes and eukaryotes. Emphasizes the modern methods used in recombinant DNA technology.

BIOL 411 - Forensic Biology Laboratory Operations

Class Hours: 2

Lab/Discussion: 2

Credits: 4

Prerequisite: BIOL 203 or BIOL 313

A broad-based learning experience in multiple areas of Biological Forensics with special emphasis in unique nucleic acid and protein signature(s) patterns associated with the forensic biological evidence. Applies the theory and practice of presumptive and confirmatory testing methods on materials of forensic interest. Features in-depth discussion that integrates advanced characterization of biological evidences as it relates to criminal investigation and interpretation of the criminal justice system.

BIOL 420 - Entomology Principles and Practice

Class Hours: 2

Lab/Discussion: 3

Credits: 3

Prerequisite: BIOL 103 or BIOL 201

Introduces the biology of insects, including identification and classification.

Enables collecting of live insects from different habitats and observation of behavior and ecological roles during outdoor laboratory activities. Emphasizes characteristics unique to insects, such as pollination, metamorphosis, sociality, host plant specificity, and population control.

BIOL 425 - Herpetology

Class Hours: 2

Lab/Discussion: 3

Credits: 3

Prerequisite: BIOL 220

A comprehensive survey of the classes of Amphibia and Reptilia, including their classification, structure, origin, evolution, phylogenetic relationships, distribution, and natural history. Special emphasis is placed on the herpetofauna of Pennsylvania.

BIOL 430 - Gene Editing Tools in Medicine and Biotechnology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: BIOL 203

Explains concepts and techniques involved in modern biotechnology as it relates to genome engineering. Understands the principles and techniques governing the gene editing tools such as CRISPR in microbiology, agriculture, animal sciences, and human health. Emphasizes acquisition of the knowledge and skills necessary to undertake gene editing using CRISPR. Addresses issues concerning their ethical, legal, and social implications in the United States and the world.

BIOL 431 - Ichthyology

Class Hours: 3

Lab/Discussion: 3

Credits: 3

Prerequisite: BIOL 103 or BIOL 201 and Sophomore status

Introduces the biology, taxonomy, natural history, and conservation of freshwater and marine fishes. Examines the morphological and physiological adaptations that have allowed fish, the most diverse group of vertebrates, to thrive across a wide array of environments throughout the globe. Lab emphasizes field collection and identification of fish found in Pennsylvania and the Great Lakes region, but select representatives from other families are also covered. Critically evaluates published scientific papers related to fish biology, physiology, and evolution.

BIOL 450 - Field Biology at Pymatuning Laboratory of Ecology

Class Hours: 3

Lab/Discussion: 3

Credits: 4

During the summer session, various field courses are offered through the Pymatuning Laboratory of Ecology. The offerings vary, depending on the summer. Possible offerings include Field Methods in Ecology and Conservation, Fish Ecology, Behavioral Ecology, Aquatic Botany, Forest Ecology, and Wildlife Conservation. Information regarding specific offerings is available from the department in the spring.

BIOL 451 - Evolutionary Biology

Class Hours: 2

Lab/Discussion: 3

Credits: 3

Prerequisite: BIOL 201, BIOL 203

A comprehensive survey of evolution and evolutionary biology, including the history of evolutionary theory, natural selection, microevolutionary and macroevolutionary processes, and the phylogenetic history and classification of life on earth. In laboratory, the focus is on learning current methods in population-level and phylogenetic analysis and presenting and leading peer discussions of important and current research in the field.

BIOL 455 - Animal Behavior

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: BIOL 201; not open to students who have fewer than 60cr

The biological study of animal behavior. Topics include the mechanisms, development, ecology, and evolution of behavior.

BIOL 456 - Ecological Toxicology

Class Hours: 2

Lab/Discussion: 3

Credits: 3

Prerequisite: BIOL 202; CHEM 112

Studies the impact of chemical pollutants and other stresses on nonhuman biological systems from the subcellular to ecosystem levels. An ecological risk assessment is conducted in the field and laboratory settings.

BIOL 462 - Vertebrate Endocrinology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: BIOL 203 or CHEM 351

Examines how hormones, or cell signaling molecules, are produced in specific endocrine tissues and alter the physiology of the of respective target tissues.

BIOL 466 - Principles of Virology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: BIOL 203 or CHEM 351

Topics include structure, classification, assay, and transmission of viruses; methods used in the study of viruses; viral replication, gene expression, and gene regulation; host-viral interactions and subviral pathogens.

BIOL 469 - Circadian Rhythms and Sleep

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: BIOL 104 or BIOL 203 or BIOL 240

Introduces the functions and mechanisms of biological clocks and rhythms in humans and animals, focusing primarily on circadian, or daily, rhythms. Examines how biological clocks keep time and influence behavior and physiology from the molecular level. Explains how circadian rhythms control sleep-wake and other important neurological functions to optimize biological fitness. Explores the consequences of disrupted circadian timing on physical and psychological health and performance.

BIOL 471 - Dendrology of the Eastern US

Class Hours: 2

Lab/Discussion: 3

Credits: 3

A comprehensive survey of the tree species in the eastern portion of North America with an emphasis on Pennsylvania forests.

BIOL 473 - Seedless Vascular Plants: Ferns and Allied Flora

Class Hours: 2

Lab/Discussion: 3

Credits: 3

Prerequisite: BIOL 210

A comprehensive survey of morphological and habitat characteristics of seedless vascular plants (generally ferns and their allies) of Pennsylvania and the surrounding states.

BIOL 474 - Spring Flora of the North Eastern US

Class Hours: 2

Lab/Discussion: 3

Credits: 3

An in-depth survey of the emerging herbaceous spring flora in the northeastern portion of North America (with emphasis on the herbaceous plants of Pennsylvania). Classes will focus on readings of current research in botanical and scientific journals conveyed through student led discussions. Field identification of representative individuals by common and generic names is also covered.

BIOL 475 - Mammalogy

Class Hours: 2

Lab/Discussion: 3

Credits: 3

Prerequisite: BIOL 201 and a minimum of 30 credits

Reviews mammalian biology including systematics, evolution, distribution, anatomical and physiological adaptations, behaviors, habitats, and ecology. Discusses mammalian biology using taxonomic orders from around the world. Focuses on identification, natural history, and methods of study for mammals native to Pennsylvania. Participation in off-campus field activities required.

BIOL 476 - Parasitology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: One year Biology, Vertebrate and Invertebrate Zoology

The parasitic protozoa, flatworms and roundworms. Major emphasis is on species infesting man and includes their structure, physiology, ecology, life cycles, and pathogenicity. Arthropods involved in parasite transmission included.

BIOL 477 - Neurobiology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: BIOL 202 or BIOL 240 or any 300-level PSYC course

Presents the underlying mechanisms through which the nervous system mediates behavior, from the molecular to the organismal level. Emphasizes two major themes: (1) the roles of synapses and neuronal excitability in shaping the input/output functions of neurons and neuronal networks and (2) the role of neuronal development and neuronal experience upon resultant neuronal organization.

BIOL 478 - Mycology and Plant Pathology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: BIOL 201, BIOL 241

Introduces fungi as one of the most important plant pathogens. Provides a basis for comparative study of different groups of fungi. Studies basic biotic and abiotic causes of plant disease, the mechanisms by which these factors induce disease, the interactions between disease agents and their hosts, disease spread, prevention, and management, and the human and environmental costs of plant diseases.

BIOL 479 - Neurobiology of Addiction

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: BIOL 104 or BIOL 203 or BIOL 240

Examines the biological foundations of addiction, with special emphasis on cellular and molecular mechanisms. Studies: (1) the effects of a wide range of drugs of abuse on brain function, (2) the neural circuitry of addiction, (3) the neurobiological influence of genes and environment on drug taking, and (4) the biological basis for traits linked to drug use, such as personality, memory, and mood. Discusses how cutting-edge biological methods are answering key questions about addiction and how the results of such research can be used to improve clinical treatment.

BIOL 480 - Biology Seminar

Class Hours: 1
Lab/Discussion: 0
Credits: 1

A discussion of recent trends in biological thought and research. Students report on assigned readings and/or personal research.

BIOL 481 - Special Topics

Class Hours: var
Credits: 1-3

Prerequisite: As appropriate to course content

Course varies from semester to semester, covering diverse topics in specific areas of biology.

BIOL 482 - Independent Study

Class Hours: var
Credits: 1-3

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost. A 2.5 cumulative GPA and in major courses is required.

Students with interest in independent study of a topic not offered in the curriculum may propose a plan of study in conjunction with a faculty member. Work is supervised by a faculty member, but does not involve regular class or laboratory hours. Approval is based on academic appropriateness and availability of resources.

BIOL 483 - Honors Thesis/Independent Study

Class Hours: var
Credits: 1-6

Prerequisite: Admission to departmental honors program; prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

An intensive, focused study involving independent research culminating in a written thesis approved by a thesis director and two faculty readers/committee members. May be taken more than once to a maximum of 6cr.

BIOL 484 - Honors Seminar

Class Hours: 2
Lab/Discussion: 0
Credits: 2

Prerequisite: Admission to the Biology Honors Program

Selected topics in biology. Use of the literature in preparation for advanced course work and BIOL 483. Analyzes the literature, develops a literature review, and develops a thesis proposal. Guest speakers provide additional exposure to major areas of biology.

BIOL 490 - Field Studies in Biology

Class Hours: var

Credits: 1-4

Prerequisite: Specific Prerequisites, as are appropriate to the course, will be set by individual instructors; instructor permission
Various specialized field courses instructed by biologists from IUP. Explores the rich diversity and ecology of the flora and fauna that inhabit specialized regions of Pennsylvania, the United States, or other countries. Emphasizes ecology, behavior, and natural history of organisms in their natural surroundings. Must meet travel and living expenses. May be taken more than once for credit and grade if content is different.

BIOL 493 - Biology Internship

Class Hours: var

Credits: 3-12

Prerequisite: Biology major with at least 60cr, 2.5 cumulative GPA, and permission of the director of internships and the chairperson
Selected students have the opportunity, under department supervision, to gain off-campus practical experience in area of interest. Only 6cr may be applied toward major; total number of credits is decided in consultation involving student, his/her advisor, and director of internships.

Business Law

BLAW 235 - Legal Environment of Business

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Explores the current American legal system by providing an introduction to a variety of legal topics important to all individuals and businesses. Topics must include sources of law, the court system and basic procedures, tort law, criminal law, and contracts. Topics may also include legal research and intellectual property. Ethical issues and international law are integrated throughout.

BLAW 336 - Law of Business Organizations

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: BLAW 235

A study of the law dealing with commercial paper, agency, partnerships, corporations, and bankruptcy.

BLAW 440 - Business Negotiations

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: BLAW 235, Jr Business Core, and Junior Standing

Covers the basic theories and strategies of negotiation in the business environment and provides instruction and practice to develop Negotiation skills. Focuses on the knowledge and skills needed in intercompany and intracompany negotiations. Focuses on neither collective bargaining nor labor relations. Open to all majors meeting the prerequisites.

BLAW 441 - The Law of Property Oil and Gas Leasing I

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: BLAW 235

Gives students an understanding of fundamental energy law, including oil and gas law. Includes analysis of natural resource leases and contracts, rights and ownership of the mineral estate, law of capture, contracts, clauses, and covenants of the oil and gas lease, oil and gas operating agreements, title and conveyance of oil and gas leases, pooling and utilization on private and federal lands, easements and right of ways in connection with natural resource exploration, environmental considerations and impacts of natural resource drilling and exploration, the legal structure of the energy industry, (Public Utility Holding Company Act, Federal Energy Regulatory Commission) land use restrictions, and eminent domain.

BLAW 442 - The Law of Property Oil and Gas Leasing II

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: BLAW 441

Second legal course in the energy/oil and gas sequence and builds upon and advances concepts from the first course. Specifically geared toward the sophisticated legal understanding required to be employed as "landman" in the oil and gas fields. Covers these topics: the Habendum Clause, the drilling and rental clause, dry hole, cessation of production, and drilling operation provisions, delayed rental and bonus provisions, forfeiture and related provisions, implied covenants, prudent operator standard, implied drilling covenants, protection covenants, development, marketing and reasonable care covenants, assignments of royalties, royalty calculation under various state laws, drilling, and operating agreements, assignment of working interest, pooling and utilization issues and problems, oil and gas forms and leases, lien subrogation rights, environmental impacts from drilling standpoint and landowner standpoint. Industry guest speakers may also address these issues.

Business and Technology Education

BTED 411 - Methods in Business and Information Technology I

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: EDSP 102, PSYC 101, and completion of the freshman and sophomore courses in the student's major areas

Includes instruction in the general methods of teaching and evaluating business courses. A major emphasis is on the planning for instruction. Creative techniques and procedures for effectively teaching and managing the classroom are evaluated. Opportunities are provided to incorporate appropriate content and materials to allow for students with special learning needs. Current issues in vocational education such as advisory committees, adult education, and federal legislation are included.

BTED 412 - Methods in Business and Information Technology II

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: BTED 411

Includes instruction in the methods of teaching and evaluating both the technology-oriented and cognitive-related courses in business education. An emphasis is placed on planning instruction, developing methods and strategies for making effective classroom presentations, delivering instruction, and managing the classroom. Opportunities are provided to undertake the responsibilities assigned to the business classroom teacher incorporating appropriate content and materials to allow for students with special learning needs. Further, the prospective teacher is given opportunities to assume the teaching role competencies and research current trends in the field.

BTED 442 - Training Methods in Business and Information Technology Support

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PSYC 101, junior standing

Includes the application of theories of adult learning to planning, delivering, and evaluating training for education and information technology. Major emphasis is on the planning of instruction. Topics include needs assessment, live and mediated instruction, classroom management, evaluation and follow-up methods, and evaluation of training strategies. (Offered as BTST 442 before 2014-15.)

BTED 470 - Technology Applications for Education

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Provides a prospective business educator with concepts, applications, and methodologies needed to be effective in today's classroom, including advanced web page coding, advanced computer applications, creation of an inquiry-oriented activity in which the information that learners interact with comes from Internet resources, and a learned society's rules for records management. Also includes instruction in the pedagogy of computer applications. The end product will be additions to students' e-portfolios as well as their work sample.

Child Development and Family Relations

CDFR 218 - Child Development

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grade of "C" or better in PSYC 101; or instructor permission

Corequisite: SOC 151 /SOC 161

Reviews cultural practices within and across global communities, developmental theories, learning theories, as well as the interrelationships among culture, development, and learning. Focuses on physical, cognitive, and social-emotional development from conception to adolescence.

CDFR 224 - Marriage and Family Relations

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grade of "C" or better in PSYC 101; or instructor permission

Corequisite: SOC 151/SOC 161

A developmental and interactional approach to understanding family studies and aids in understanding family life, with a primary emphasis on contemporary families. Relevant theoretical perspectives of how families operate are discussed. Areas covered include trends in family structures and functions globally, conducting research in family studies from a global perspective, diversity among families, gender roles in dating and marital relationships from a global perspective, communication and conflict resolution, human sexuality in contextual relationships, dating and singlehood, combining work and family roles, trends from a global perspective on parenting, effects of race and class on families, domestic violence, and divorce and remarriage.

CDFR 310 - Child Observation and Assessment

Class Hours: 2

Lab/Discussion: 2

Credits: 3

Prerequisite: Grade of "C" or better in CDFR 218 or ECED 112 or ECSP 112 or instructor permission

Examines the appropriate use of assessment and observational strategies to document children's behavior, learning, and development. Discusses principles of assessment across contexts. Methods of analysis for observation data are also reviewed.

CDFR 315 - Introduction to Early Intervention

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grade of "C" or better in CDFR 218, CDFR 224, CDFR 310

Focuses on early intervention policies and laws that relate to services for children from birth to school age, including the Individualized Family Service Plan (IFSP) and the Individualized Education Plan (IEP) process. Special emphasis is placed on ways to assist families in their roles as team members in the early intervention process, taking social, linguistic, economic, and cultural diversity into consideration. Provides practical information needed when working in early intervention settings.

CDFR 321 - Preschool Education: Play and Developmentally Appropriate Practices

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grade of "C" or better in CDFR 218

Emphasizes play as a developmental process, the primary vehicle for early learning and as the major aspect of the preschool curriculum. Utilizes development theories as the basis for early learning environments. Provides students with knowledge to implement developmentally appropriate curriculum and methods for preschool education programming in multiple settings (e.g., home, classroom, community).

CDFR 322 - Early Care and Education

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grade of "C" or better in CDFR 218 and previous 200- and 300-level child development and family relations courses

Introduces the historical background of the fields of childcare and early childhood education and current educational issues and theories affecting the field. Includes curricula models, frameworks for curricula, research on the impact of early childhood experience, and diversity and inclusion issues.

CDFR 323 - Family Issues

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grade of "C" or better in CDFR 224

A concentrated study of selected areas of family life, with emphasis on current personal and social issues affecting the family.

CDFR 410 - Infant and Toddler Development

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grade of "C" or better in CDFR 218 and CDFR 310; compliance with current agency regulations; or instructor permission

A study of characteristic developmental changes of human infants and toddlers from birth to approximately 36 months. Participation as teacher

assistant in the infant/toddler childcare center provides experience in developmentally appropriate guidance and programming for very young children.

CDFR 411 - Family and Community

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grade of "C" or better in CDFR 218, CDFR 224, CDFR 310, CDFR 315, CDFR 323; compliance with current agency regulation and enrolled in major/minor or instructor permission

A study of community agencies and their service to families. Covers advocating for children and families, identifying community agencies that aid families in need, examining the professional code of ethics and ethical decision making, and recognizing signs of trouble within families and referring them appropriately. Community service and agency speakers are integrated into course work. Participation in a community service project is a mandatory part of the course. Completion of this course with a grade of "C" or better is required for graduation.

CDFR 420 - Infant Toddler Mental Health

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: CDFR 410

An introduction and overview of Infant Mental Health. Focuses on strengths in infants and families, a relational framework for assessment and intervention, and a prevention orientation. Emphasizes an understanding of how principles of infant mental health provide a foundation for working with children and families across settings and disciplines.

CDFR 425 - Adolescence: Risk and Resiliency

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grade of "C" or better in CDFR 218 and CDFR 224

Focuses on growth and development of pre-adolescents and adolescents, parenting of adolescents, and adolescents as parents. Special emphasis is given to identifying risk and resiliency factors when working with adolescents and families in the field of human services. A variety of human development theories are examined in an attempt to understand the adolescent from both an individual and a societal point of view.

CDFR 426 - Techniques of Parent Education

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grade of "C" or better in CDFR 218, CDFR 224, CDFR 310, CDFR 315, CDFR 321, CDFR 322

An examination of the nature, extent, and significance of parent education and parent involvement. Students become knowledgeable of the diverse and complex characteristics and needs of families. Enables students to identify the interrelationships of home, school, and community agencies to enhance collaboration and cooperation. Students identify methods, programs, and curricula to increase communication with parents and families.

CDFR 427 - Administration of Human Service Programs

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Child development and family relations major or minor or instructor permission

Facilitates the acquisition of special knowledge and competencies needed by successful administrators of human service programs, including proposal writing, budgeting and management, staff selection and training, and program evaluation. (Titled Administration of Child Development Centers before 2016-17.)

CDFR 428 - Family Dynamics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grade of "C" or better in CDFR 224, CDFR 310, CDFR 323; and enrolled in major or instructor permission

Emphasizes processes and models of family development topics, including an understanding of the development and maintenance of interpersonal relationships with an emphasis on how the theoretical frameworks of family studies can aid in this understanding. Focuses on approaches and dynamics of principles related to familial and marital adjustment and coping, with an emphasis on understanding the strengths and weaknesses of families and how family members relate to each other.

CDFR 429 - Teaching in Community Settings

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite:

CDFR 310, CDFR 410; compliance with current agency regulations; and major/minor, or instructor permission; 90+ credits

Provides experience in developmentally appropriate guidance and programming for children through participation as a teacher assistant in a community early care or school age center. Focuses on the application of principles and concepts of child development. Emphasizes techniques of planning developmentally appropriate activities and utilizing positive guidance with groups of diverse children.

CDFR 430 - Poverty and Human Development

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: CDFR 425

Examines the measurement and perception of socioeconomic status in the United States with an emphasis on poverty. Facilitates the discussion of research, theory, and policy related to poverty and human development.

CDFR 481 - Special Topics

Class Hours: var

Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 481 are primarily for upper-level undergraduate students.

CDFR 482 - Independent Study

Class Hours: var

Credits: 1-3

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

Upper-level students with high scholastic achievement pursue their particular interests outside the realm of the organized home economics education curriculum. May be taken more than once to a maximum of 3cr. Approval is based on academic appropriateness and availability of resources.

CDFR 493 - Internship

Class Hours: 0

Lab/Discussion: 6 to 12

Credits: 6-12

Prerequisite: Permission of child development and family relations program, human development, fashion, and interior design department, and college dean; completion of at least 75cr; minimum GPA of 2.5 in major; compliance with current agency regulations; and enrolled in major Practical field experience related to the student's major area of study. Specific objectives are developed individually in consultation with the internship coordinator and/or university faculty member who supervises the internship. Logs and major paper required. May be taken for 6 to 12 credits.

Chemistry

CHEM 100 - Preparatory Chemistry

Class Hours: 3

Lab/Discussion: 0

Credits: 3

A discussion of the fundamental terminology, calculations, and concepts of chemistry, including scientific measurements and calculations, simple definitions and concepts, atomic structure, the mole, mass and solution stoichiometry, ionic and covalent bonding, and the naming of atoms, molecules, and ions. Prepares science majors with limited backgrounds in chemistry for freshman chemistry courses and may not be used toward any major or minor or Liberal Studies. Restricted to students in the Colleges of Natural Sciences and Mathematics and Health and Human Services. Students who have earned a "C" or better in a higher number chemistry course may not take this course.

CHEM 101 - College Chemistry I

Class Hours: 3

Lab/Discussion: 2

Credits: 4

Basic principles and concepts of inorganic chemistry are developed using atomic and molecular structure with illustrative examples from descriptive chemistry. The laboratory portion illustrates physical and chemical properties in a qualitative and quantitative manner. For selected majors within the College of Health and Human Services and to fulfill the Liberal Studies Natural Science Laboratory Sequence requirement.

CHEM 102 - College Chemistry II

Class Hours: 3

Lab/Discussion: 2

Credits: 4

Prerequisite: CHEM 101 or CHEM 111

Fundamental principles and concepts of organic chemistry and biochemistry are studied. Deals primarily with structural features of organic compounds, the chemistry of functional groups, and practical examples and uses of organic compounds. The laboratory portion illustrates properties and reactions of representative organic compounds. For selected majors within the College of Health and Human Services and to fulfill the Liberal Studies Natural Science Laboratory Sequence requirement.

CHEM 103 - Introduction to Chemistry for Health Sciences

Class Hours: 3

Lab/Discussion: 2

Credits: 4

Survey of key concepts of general and organic chemistry, with special emphasis on the application of these concepts to the health professions. Topics include measurements, chemical equations, gasses, solutions, acids and bases, hydrocarbons and organic functional groups. Course includes a laboratory component that focuses on quantitative skills. For selected majors within the College of Health and Human Services and to fulfill the Liberal Studies natural science laboratory requirement.

CHEM 105 - The Forensic Chemistry of CSI

Class Hours: 3

Lab/Discussion: 0

Credits: 3

For students who would like to learn about forensic chemistry and the basic science needed to understand it. Chemical concepts on the level of an introductory chemistry course and their applications to forensic science are explored in detail. Topics include the forensic analysis of drugs, fibers, glass, fingerprints, arson, questioned documents, and other types of physical evidence. Other topics include how forensic science is portrayed in novels, movies, computer games, and TV and the methods used in forensic evidence collection at a crime scene. Course cannot be used to fulfill the requirements for a chemistry major or minor

CHEM 111 - General Chemistry I

Credits: 4

An introductory course for science and preprofessional health majors. First half of a two-semester sequence designed to give students the foundation of knowledge and laboratory techniques required to successfully complete a degree program in the sciences or gain entry into professional health programs. Topics include atomic theory, an introduction to chemical reactions, stoichiometry, gas laws, thermochemistry, chemical bonding, and molecular geometry.

CHEM 112 - General Chemistry II

Credits: 4

An introductory course for science and preprofessional health majors. Second half of a two-semester sequence designed to give students the foundation of knowledge and laboratory techniques required to successfully complete a degree program in the sciences, or gain entry into professional health programs. Topics include the solid states, solution theory, kinetics, equilibrium, thermodynamics, acids and bases, and electrochemistry

CHEM 113 - Advanced General Chemistry I

Credits: 4

and solid state, and solution theory. Topics are covered in greater depth and with more challenging problem solving than General Chemistry. For majors within the College of Natural Sciences and Mathematics and to fulfill the Liberal Studies Natural Science Laboratory Sequence requirement for those students.

CHEM 114 - Advanced General Chemistry II

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: Grade of "C" or better in CHEM 113

A continuation of Advanced General Chemistry I. Topics include solutions, chemical kinetics, equilibrium and thermodynamics, acids and bases, buffers, and electrochemistry. Topics are covered in greater depth and with more challenging problem solving than General Chemistry. For majors

within the College of Natural Sciences and Mathematics and to fulfill the Liberal Studies Natural Science Laboratory Sequence requirement for those students.

CHEM 231 - Organic Chemistry I

Class Hours: 3

Lab/Discussion: 4

Credits: 4

Prerequisite: CHEM 112 or CHEM 114

A study of compounds of carbon, with a special emphasis on structure-reactivity relationships. Laboratory work emphasizes methods of separation and purification of organic compounds.

CHEM 255 - Biochemistry for Health Sciences

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: CHEM 103 or instructor permission

Introductory course for selected students in the College of Health and Human Services that focuses on the fundamentals of biochemistry. Provides a basic understanding of biomolecular processes so that this knowledge can be utilized to understand current and future aspects of molecular therapeutics. For selected majors within the College of Health and Human Services and to fulfill the Liberal Studies natural science nonlaboratory requirement.

CHEM 290 - Chemistry Seminar I

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Prerequisite: Chemistry major or instructor permission

Provides knowledge to students concerning undergraduate research and career possibilities based on a degree in chemistry or biochemistry. Much of this class consists of presentations to students by research faculty in chemistry, biochemistry, and other departments across the university.

CHEM 314 - Inorganic Chemistry

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: CHEM 112 or CHEM 114

Surveys chemical compounds and conceptual models. Includes symmetry and bonding theory, acid-base models, solids, coordination and organometallic complexes and bioinorganic chemistry. The laboratory portion builds on experimental skills and provides hands-on examples of lecture concepts.

CHEM 325 - Analytical Chemistry I

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: CHEM 231

An introduction to the principles of analytical chemistry, including gravimetric, volumetric, and basic instrumental analysis. Special emphasis is placed on both perfecting the student's laboratory technique and on the application of general chemical knowledge through problem solving.

CHEM 326 - Analytical Chemistry II

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: CHEM 325, CHEM 341

A more detailed examination of the principles of analytical chemistry. Student learns theoretical and practical aspects of sampling, data acquisition, and spectroscopic, electrochemical, chromatographic, thermal, mass spectrometric, and affinity methods of analysis.

CHEM 332 - Organic Chemistry II

Class Hours: 3

Lab/Discussion: 4

Credits: 4

Prerequisite: CHEM 231

A continuation of Organic Chemistry I, with an introduction to spectroscopic techniques. Laboratory work emphasizes the synthesis of representative compounds.

CHEM 341 - Physical Chemistry I

Class Hours: 4

Lab/Discussion: 0

Credits: 4

Prerequisite: PHYS 112 or PHYS 132; MATH 126; grade of "C" or better in CHEM 112 or CHEM 114

Foundations of chemical thermodynamics, equilibria, kinetics, quantum mechanics, and spectroscopy.

CHEM 343 - Physical Chemistry Laboratory I

Class Hours: 0

Lab/Discussion: 3

Credits: 1

Prerequisite: CHEM 341 (may be taken concurrently)

Experiments illustrating application of fundamental laws to actual systems.

CHEM 351 - Biochemistry

Class Hours: 4

Lab/Discussion: 0

Credits: 4

Prerequisite: CHEM 231

A study of chemistry and biological functions of carbohydrates, lipids, proteins, minerals, vitamins, and hormones.

CHEM 390 - Chemistry Seminar II

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Prerequisite: CHEM 290 or CHEM 332 or instructor permission

Presents the skills necessary to design research proposals, to search for and apply to pre- and post-degree external academic research experiences and workplace opportunities, and to understand their roles and expectations for ethical research and publications.

CHEM 401 - Advanced Chemistry Lab

Class Hours: 2

Lab/Discussion: 6

Credits: 4

Prerequisite: CHEM 332 or instructor permission

Application and analysis of advanced laboratory techniques for chemistry majors. Topics will be taken from across chemistry, and students will use techniques such as synthesis, physical characterization, computation, spectroscopy and electrochemistry to gain experience with a wide spectrum of chemical techniques. An in-depth project is included in this course.

CHEM 411 - Advanced Inorganic Chemistry

Class Hours: 2

Lab/Discussion: 3

Credits: 3

Prerequisite: CHEM 314, CHEM 341

Discussion of advanced theories of atomic structure, chemical bonding, acids and bases, coordination compounds, and selected topics. In the laboratory portion, techniques used in the synthesis and characterization of inorganic compounds are explored.

CHEM 431 - Organic Molecular Structure Determination

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: CHEM 231-CHEM 332 (CHEM 332 may be taken concurrently)

Examines modern and advanced methods of elucidation of the structures of organic molecules, including NMR, MS, and IR. Discusses the fundamental physical and chemical principles of each method. Focuses on structure determination by interpretation of data (spectra), either individually or combined. Emphasizes structure determination as currently applied in the chemical industry.

CHEM 435 - Current Topics in Organic Chemistry

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: CHEM 332 and CHEM 341

Selected topics of current interest covered. Possible topics include reaction mechanisms, molecular spectroscopy, stereochemistry, natural products, heterocyclics, polymer chemistry, and organic synthesis.

CHEM 442 - Advanced Physical Chemistry

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: CHEM 341, MATH 225 (may be taken concurrently) In-depth exploration and applications of chemical thermodynamics, equilibria, kinetics, quantum mechanics, and spectroscopy.

In depth exploration and applications of chemical thermodynamics, equilibria, kinetics, quantum mechanics, and spectroscopy.

CHEM 444 - Advanced Physical Chemistry Laboratory

Class Hours: 0

Lab/Discussion: 3

Credits: 1

Prerequisite: CHEM 343; must be taken after or concurrent with CHEM 442

An extension of CHEM 343; experiments related to chemical kinetics, molecular spectroscopy, and other topics of physical chemistry.

CHEM 460 - Chemistry and Physics of Materials

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: CHEM 112 or CHEM 114 and PHYS 112 or PHYS 132

Provides unified treatment of materials. Emphasizes physical and chemical origins of material properties. Multidisciplinary approach using chemistry, physics, and geoscience to study bonding and crystal chemistry. An interdisciplinary approach to the study of material phenomena involving electronic devices, energy storage, second harmonic generation, superconductivity, and others.

CHEM 461 - Modern Diffraction

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: CHEM 112 or CHEM 114 and PHYS 112 or PHYS 132

Investigates advances in crystallography and its applications to modern science. Emphasizes powder diffraction, including Rietveld analysis. Develops proficiency in data collection, phase analysis, and structure refinement and shows how crystallographic science can address scientific problems.

CHEM 481 - Special Topics

Class Hours: var

Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 481 are primarily for upper-level undergraduate students.

CHEM 490 - Chemistry Seminar III

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Prerequisite: CHEM 390

A discussion of recent trends in chemical thought. Oral and written reports on assigned readings, library, or laboratory research. Guest lecturers. A seminar course to provide knowledge to students regarding effective oral and written scientific communication. Students refine their skills in reading and evaluating research papers from the literature, write a formal research paper, and present a research seminar. The combination of CHEM 390 and 490 counts as one writing-intensive course.

CHEM 493 - Internship in Chemistry

Class Hours: var
Credits: 4-9

Prerequisite: CHEM 111 or CHEM 113, CHEM 112 or CHEM 114, CHEM 231, , 321, CHEM 341, junior status, and departmental approval
Full-time involvement in an actual "on-the-job" situation in an industrial or research laboratory under the tutelage of a selected preceptor. A department faculty member works closely with the student and preceptor and assumes responsibility for making the final evaluation and assigning a grade.

CHEM 498 - Problems in Chemistry

Class Hours: var
Credits: 1-2

Prerequisite: CHEM 231 and permission of chairperson
Supervised undergraduate research, in conjunction with a faculty member in the Chemistry Department.

Chinese

CHIN 101 - Elementary Chinese I

Class Hours: 4
Lab/Discussion: 0
Credits: 4

For beginning students. Introduces the Chinese language, with attention focused on the three modes of communication: interpretive listening and reading, interpersonal speaking and writing, and presentational speaking and writing. Students learn pronunciation, fundamental grammatical patterns, and how to write approximately 250 characters. Also imparts knowledge of Chinese culture and society. Attendance is required. May not register for or take a D/F repeat in CHIN 101 when credit has already been received for a higher-numbered Chinese course.

CHIN 102 - Elementary Chinese II

Class Hours: 4
Lab/Discussion: 0
Credits: 4

Prerequisite: CHIN 101

A continuation of Elementary Chinese I, focusing on the three modes of communication—interpretive listening and reading, interpersonal speaking and writing, and presentational speaking and writing—to build proficiency in using the Chinese language in real-life situations. Also imparts knowledge of Chinese culture and society. Attendance is required. May not register for or take a D/F repeat in CHIN 102 when credit has already been received for a higher-numbered Chinese course.

CHIN 201 - Intermediate Chinese

Class Hours: 4
Lab/Discussion: 0
Credits: 4

Prerequisite: CHIN 102

A continuation of previous work on the three modes of communication: interpretive listening and reading, interpersonal speaking and writing, and presentational speaking and writing, so that students can function in everyday situations. Also imparts knowledge of Chinese culture and society. Liberal Studies credit is given. Attendance is required. May not register for or take a D/F repeat in CHIN 201 when credit has already been received for a higher-numbered Chinese course.

CHIN 281 - Special Topics

Class Hours: var
Credits: 1-3

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 481 are primarily for upper-level undergraduate students. Designed to meet the special needs of a student group.

CHIN 481 - Special Topics

Class Hours: var
Credits: 1-3

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 481 are primarily for upper-level undergraduate students. Designed to meet the special needs of a student group.

CHIN 482 - Independent Study

Class Hours: var
Credits: 1-3

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 481 are primarily for upper-level undergraduate students. Designed to meet the special needs of a student group.

College of Humanities and Social Sciences

CHSS 142 - Introduction to Secondary Social Studies Education

Class Hours: 1
Lab/Discussion: 0
Credits: 1

Prerequisite: Secondary Social Studies Education or History Majors in first year of study or with the consent of instructor.
Introduces the foundational concepts and practices in social studies education, the vocabulary of social studies education, and the qualities and best practices of an effective social studies educator.

CHSS 342 - Social Studies Teaching Lab

Class Hours: 0
Lab/Discussion: 1
Credits: 1

Prerequisite: EDUC 242 and currently enrolled in EDUC 342
A laboratory experience providing the opportunity to explore and experiment with strategies and methodologies connected with teaching in the various disciplines of the social studies. Offers hands-on experience with public school students in a controlled setting. Allows students to experience middle and high school settings as well as build a repertoire of social studies teaching methodologies that enables them to complete EDUC 342 more effectively.

CHSS 343 - Applied Practice in Secondary English Language Arts

Class Hours: 1
Lab/Discussion: 0
Credits: 1

Prerequisite: EDUC 242

Corequisite: Concurrent with EDUC 342

In conjunction with EDUC 342, prepares candidates for field experience in secondary English language arts. Students continue to develop skills for school-site observation, are introduced to philosophical models of classroom management, and receive instruction about completing the Step 2 portfolio requirement. Provides opportunity for students to apply understanding of pedagogical content knowledge to observation and lesson design and to familiarize themselves with teacher research methodology.

Communications Media

COMM 101 - Introduction to Communications, Media, and Culture

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Required of communications media majors. An introduction to the evolution, status, and future of communications media. Explores intrapersonal communication through self-assessment, values clarification, and feedback; interpersonal communication through interviews, observations, case studies, and gaming; and mass communications through the examination of the processes and the technology utilized to disseminate and manage information. Career paths, field applications, professional associations, and the primary literature are investigated.

COMM 143 - Media Wellness

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Helps students understand how media affects wellness. Analyzes and evaluates media consumption and media effects (both positive and negative) in a variety of genres including traditional and social media. Explores concepts of media literacy including evaluation and analysis of media content. Successful completion of this course fulfills the Liberal Studies Dimensions of Wellness requirement. Other 143 courses also fulfill this requirement, and any of these courses may be substituted for each other and may be used interchangeably for D/F repeats but may not be counted for duplicate credit.

COMM 150 - Media Aesthetics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite or Corequisite: COMM 101 or JRNL 105

Examines the theoretical assumptions of sight, sound, and motion as applied to the design of communication products for different media formats. Demonstrates strategies for creative composition. Discusses psychological and physiological implications of images.

COMM 151 - Basic Lighting for Still and Motion Imagery

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Examines the basic technical and design aspects of artificial and natural lighting in capturing still and motion imagery. Emphasizes mastery of the terminology and simulation of lighting concepts and conditions through virtual lighting software.

COMM 201 - Internet and Multimedia

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: BTED/COSC 101/IFMG 101 or prior exposure to word processing and electronic mail

Focuses on the evaluation of information and multimedia resources available on electronic networks when doing research in an area of one's choice. Information literacy course for students to gain a more in-depth understanding of the information resources available electronically and of how to utilize them more effectively in communicating. Students learn how to access and utilize these resources for two-way communications and support for decision making while incorporating selected elements in multimedia presentations of their own design. (BTED/COMM/COSC 201 /IFMG/LIBR 201 may be used interchangeably for D/F repeats and may not be counted for duplicate credit.)

COMM 205 - Making Presentations with Media

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: COMM 101

An introduction to basic presentation skills, emphasizing the use of media to enhance presentations. Students research, organize, and write presentations; design appropriate media; and deliver individual and team presentations.

COMM 206 - History and Theory of Making Games

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: COMM 150

Explores the origins of games and game play into the contemporary era of video and electronic games. Introduces the history of the games industry and the process of how games are created. Analyze games through an ethical and developmental framework, as well as explores how games are used for entertainment, teaching, and training.

COMM 207 - Online Media Production

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Examines the development and production of media for online applications such as video sharing and social media sites. Discusses management, as well as the fiscal, ethical, and technological issues surrounding online media. Requires students to complete a production project where they develop and produce audio, video and other digital media components for online distribution for a social media campaign.

COMM 230 - Global Media and Communication

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Provides an overview of global media and international communications. Describes how international communication and development of global media has influenced relationships among nations and among people with different cultural backgrounds. Covers social, economic and political situations prior to and after globalization, which include global issues that intersects with media ownership, access to media, and the impact of media communications on culture and people living in developed and developing countries. Analyzes how understanding global media and communication can enhance students to think critically, respect their own identities, history and culture as well as others.

COMM 240 - Communications Graphics

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: COMM 101 or JRNL 105, communications media major or minor, photography and digital imaging certificate or digital history certificate enrollment or permission

An introduction to graphic design concepts and related processes and techniques for a variety of forms of presentation media including television, multimedia, and online communications for educational, corporate training, and communications specialists. Both two- and three-dimensional design and basic animation concepts are explored. Hands-on experiences using a variety of graphic software applications.

COMM 249 - Basic Audio Recording Techniques

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: COMM 101 or JRNL 105, communications media major or minor, popular music studies certificate, audio production certificate, or digital history certificate enrollment or permission

Theory and practice of recording sound, developing an understanding of the language of sound recording as well as the ability to make sound recordings. Offers exposure to recording for various media including radio, music, motion pictures, television, and multimedia production. Material also appropriate for teachers who wish to make use of audio recording in the classroom. Provides hands-on experience through labs and projects to be completed outside of class.

COMM 251 - Television Production

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: COMM 101 or JRNL 105, communications media major or minor, photography and digital imaging certificate enrollment or permission

Develops basic skills in television production and direction. Consideration of operating problems of a television studio, as well as functions, limitations, and capabilities of television equipment and facilities.

COMM 261 - Teamwork and Communication Skills for College and Career

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Focuses on developing teamwork and communication skills for the presentation of career-oriented, technically rich information. Applies foundational theories of communication and the rhetoric of public communication and use that understanding to present academic research, data, and technical information orally and in written form. Prepares students to engage audiences, frame and present arguments, and develop the ability to present their topic and its significance in technical and non-technical settings. Explores different types of presentation situations including team oral presentations, team written reports, poster session presentations, platform presentations, symposia, and panel discussions. Prepares students to produce appropriate media to supplement their presentations. Presentations are video recorded for individual, peer, and instructor evaluation.

COMM 270 - Sport Communication

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: ENGL 101

Provides an overview of sport communication, focusing on different communicative contexts including interpersonal, organizational, and public

communication. Emphasizes media relations and the skills essential for sport communication professionals, including handling media interactions, crises, and integration of positive public relation strategies. (Also offered as KHSS 270; may not be taken for duplicate credit.)

COMM 271 - Beginning Photography

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COMM 101 or JRNL 105, communications media major or minor, interior design major, photography and digital imaging certificate or digital history certificate enrollment or permission

Develops students' abilities in the practice and application of photography as a tool for communications and as a creative pursuit. Emphasizes proper technical skills and creative application of the medium. Covers topics such as camera operation, image editing, and image analysis.

COMM 281 - Special Topics

Class Hours: var

Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 281 are offered primarily for lower-level undergraduate students.

COMM 302 - Research in Communications Media

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COMM 150, ENGL 101 and ENGL 202 (grade of "C" or better)

Provides knowledge of the resource materials and research strategies used in the communications media field. Students design basic data gathering instruments, collect data, and assimilate information from various sources and data into communication products, services, or documents.

COMM 303 - Scriptwriting

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COMM 101 or JRNL 105; ENGL 101 and ENGL 202 (grades of "C" or better) or permission

An introduction to the design of media materials and script writing. Style and techniques of writing are analyzed. Classroom emphasis is on writing critiques, and revision of designs and scripts. Scripts for audio, multimedia presentations, and motion picture and television productions are written. May be offered under a different topic area such as: COMM 303 Scriptwriting: Comedy or COMM 303 Scriptwriting: Drama. May be repeated for a maximum of six credits under a different topic area. Students who need to D/F repeat COMM 303 may repeat the course under a different variable title.

COMM 306 - 2-D Digital Game Development

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COMM 206

Examines the theory and development of digital games. Topics explored include the logics of gameplay, the process of game development, gaming

technology, and the psychology of gaming. The history and organization of the gaming industry are also examined. Students also create deliverables around a game concept they develop in the process of completing the course.

COMM 315 - Persuasive Media Writing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COMM 101 or JRNL 105; ENGL 101 and ENGL 202 (grades of "C" or better)

Introduces concepts of writing persuasive announcements, such as commercials and promotional messages, and other content for digital media. Analyzes persuasive media announcements, and incorporates writing with the use of evidence, emotion, and reasoning to reach audiences. Aids in understanding how to create media messages that influence audience attitudes and behaviors.

COMM 325 - Gender in Media

Class Hours: 3

Lab/Discussion: 0

Credits: 3

An overview of women in media (including television, film, radio, the Internet, etc.) and the historical development, along with social context that influence women's involvement in the media, both nationally and internationally. Analyzes topics related to media effect theories and portrayal of women in media that influence some of the issues women face in their gender roles. Also identifies key women in media from the past and present and their contributions to the field.

COMM 335 - Communications Consulting and Project Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COMM 101 or JRNL 105

Presents the theoretical views and clinical applications of consulting skills and practices associated with and needed by communication professionals. Presented are the functions and role of the consultant, the client's perspective on consulting, hiring a consultant, ethics in consulting, personal assessment tests, and related literature and models.

COMM 340 - Advanced Communication Graphics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COMM 240, permission

An in-depth experience in planning and preparing graphic materials commonly used in the communications profession; graphic materials include design, photo sketching, lettering, slide titling and duplication, preparation of camera-ready art, lithographic film and master layout sheets, professional slide flat production and photocopy, large-format transparency production, color key, and color systems.

COMM 345 - Television Criticism

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COMM 150 or instructor permission

The medium of television offers a unique environment for development and delivery of information, entertainment, and news. Explores and analyzes television programming. Includes examination of genres ranging from situation comedy to drama to miniseries and made-for-TV movies.

COMM 348 - Animation

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COMM 150

Introduces traditional and digital animation techniques and offers practical experience in planning and producing animated sequences. Includes a history of animation and theories of animation, both applied and as a communication medium. Practice in designing, drawing, modeling, simulating, creating, and texturing animated sequences; preparation of character designs; story boards and cue sheets; integration of visual effects, animation, and sound.

COMM 349 - Radio Production

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COMM 101 or JRNL 105; communications media major or minor, audio production certificate enrollment or permission

An introduction to production techniques as they pertain to radio. Exposure to programming, scripting, producing programs, intros, outros, commercials, public service announcements, station identifications, and promotional announcements. Also deals with the interaction of a radio station with national networks and with the real-life concerns of deadlines.

COMM 350 - Digital Storytelling

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COMM 249 or COMM 251 or COMM 349; cannot be taken concurrently; communications media major or communications media minor or audio certificate status

Introduces the process of documentary style storytelling through digital media, including podcasting and vlogging. Evaluates the history of these digital platforms and how they are used to tell stories. This production course affords opportunities to produce story content to enhance storytelling abilities within a given media format.

COMM 351 - Advanced Video Production

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COMM 251

A production course that emphasizes advanced field production techniques. Some of the topics covered include; field lighting, video post-production editing with A-B roll, on-line editing, and non-linear editing. Provides hands-on experience through projects and field trips. May be offered under a different topic area such as: COMM 351 Advanced Video Production: Documentary Video or COMM 351 Advanced Video Production: Music Videos. May be repeated for a maximum of six credits under a different topic area. Students who need to D/F repeat COMM 351 may repeat the course under a different variable title.

COMM 354 - Media Law and Policy

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COMM 150 or instructor permission

Surveys areas of law and policy regulating commercial and consumer use of media technologies. Covers law and policy pertaining to broadcasting and cable, intellectual property, station licensing and renewal, defamation, privacy, Internet regulation. Examines the historical development of the FCC and its jurisdictions. Discusses case studies along with the relevancy of some laws as they pertain to today's mediated society. (Titled Broadcast Regulation before 2015-16.)

COMM 355 - Editing for Video and Film

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COMM 251

Explores the art of video and film post-production and editing techniques utilizing editing software. Reviews editing theory to edit audio, video, film, and graphic footages. Covers advanced topics such as adding visual (VFX) and sound (SFX) effects.

COMM 360 - Digital Sports Production

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Instructor permission

An introduction to the pre-production, production, and post-production processes of live and recorded sporting events. Engagement in all aspects of the production process, including live production for webcasting, video-recording and editing sporting events. Attendance and participation is required in the production of selected local sporting events, which may include nights and weekends outside of regular class time. This course may be repeated one time for a maximum of six credits.

COMM 371 - Advanced Photography

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COMM 271, permission

Develops camera and print-making skills to the degree that salon-quality photographic prints can be produced. Students will understand the photographic processes utilized in producing a high-quality negative and print to the extent that they can manipulate those processes to communicate an intended message with their photographs. Emphasizes camera and print control as well as composition and negative and print manipulation.

COMM 374 - Documentary Photography

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Junior/senior standing, COMM 101 or JRNL 105, or permission

Prepares students to photograph documentary content that explores aspects of historical significance, cultural value, social change, and social injustice. Explores the differences and similarities between documentary photography and purely aesthetic photography to capture images focused on social and historical value. Calls for students to critically analyze documentary images, projects, photographers, and the societal impact they have made to create new and influential images for modern and future utilization. Students are required to have access to a digital camera.

COMM 375 - Mass Media and Behavior

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: PSYC 101 and junior or senior status

Theory and research on the influence of the mass media on human behavior and attitudes. Topics include the effects of news and political advertising on public opinion; the effects of racist and sexist portrayals; and the effects of violence and pornography on aggressive behavior. (Also offered as PSYC 375; may be taken only once.)

COMM 380 - The History of African Americans in Film

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Traces the historical development of the roles of African Americans in film. Examines the early stereotypic portrayals of this group, the origins of these stereotypes, and the ongoing changes, positive and negative, that have occurred regarding the media representation through research, film, and archetypal analysis, observation, and discussion. The new generation of African American filmmakers and their creative efforts to promote more realistic portrayals are analyzed.

COMM 390 - Practicum in Communications

Class Hours: var
Credits: 1-3

Prerequisite: Communications media major, department permission

A specialized study under the supervision of a faculty sponsor. Students make media service contributions to department and campus media-related facilities, while receiving credit. For each practicum credit, students will log a minimum of 90 hours of service. A maximum of 6 practicum credits can be used within a 120-credit degree program. The combination of practicum and internship credits cannot exceed 15 credits.

COMM 395 - Career Planning in Communications Media

Class Hours: 1
Lab/Discussion: 0
Credits: 1

Prerequisite: Communications media major only with junior/senior status

Serves as the primary skill-building and strategy-seeking experience for the internship program and later career entry and growth. Extensive writing, research, and individual counseling are involved.

COMM 401 - Media Programming and Promotion

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Explores the process and practice of promoting media outlets and the content on those outlets. Engages in an understanding of the purpose and methods of developing, launching, scheduling, and evaluating programming on traditional and newer media platforms. Using those concepts, aids in an understanding of promoting that media content by providing instruction in developing, writing and executing promotional concepts to gain audiences for specific media outlets.

COMM 403 - Multimedia News Writing

Class Hours: 3
Lab/Discussion: 0

Credits: 3

Prerequisite: COMM 101 or JRNL 105; ENGL 101 and ENGL 202 (grades of "C" or better) or permission

Introduces students to various styles and script formats used in writing news scripts for multiple media platforms including radio, television and online content. Analyzes news related theories and the legal and ethical responsibilities of news writers and producers. Focuses on writing skills for different platforms.

COMM 406 - 3-D Game and Simulation Design and Development

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COMM 348

Examines the theory and development of 3-D digital games and simulations from a communications media perspective. Learners are exposed to topics such as the logical structure of 3-D games and simulations, 3-D game technology, and the process of 3-D digital game development. Learners are also exposed to the history and organizational structure of the 3-D game industry as well as its theory and history.

COMM 407 - Television Feature Production

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COMM 251

Teaches the creative and technical elements necessary to produce feature programming for television. Combines theory and practice, with an emphasis on practice. Provides knowledge and skills on video capture, audio pick-up and mixing, and lighting design for field production and in-studio production. Produces feature stories for television, which includes filming on and off campus, script writing, interviewing, and editing as practiced at an international level.

COMM 408 - Media Field Studies

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COMM 101 or JRNL 105, junior standing, and instructor permission

A hands-on course to help students learn about the production process involving on-location production. Has three distinct phases: Students begin with research and preproduction tasks on campus, may travel to a remote site to collect additional information and images, and use those images to complete a production; students are responsible for travel expenses.

COMM 414 - Music, Media, and Culture

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Communications media major or minor, or popular music studies certificate and junior standing

Examines the intersections between media technologies, popular music, and culture. May include technology's constant influence in musical performance, production, and distribution; the music industry's marketing of popular music; popular music's relationship to cultural identity (e.g., race, gender, sexuality); and music as a cultural practice.

COMM 420 - Media Portrayal of Crime

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: COMM 101 or JRNL 105 or CRIM 101 or departmental permission

An examination of the portrayal of crime in the media (television, film, newspapers, music, video games, electronic/Internet). This includes, but is not limited to, victims, offenders, criminal justice actors, and the criminal justice system. Of importance is how the media select what is newsworthy and how they describe and/or alter criminal justice issues. Attention is paid to the media's influence on perceptions of crime, the ethics behind the media's perceptual influence, criminology and criminal justice issues of the general population, and the resultant criminal justice policies. Seminar based. (Also offered as CRIM 420; may not be taken as duplicate credit.)

COMM 440 - Multimedia Production

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: COMM 240 or instructor permission

Presents the processes and techniques of planning, designing, and producing used with interactive multimedia. Provides hands-on experiences in the use of graphics, audio, animation, video, and authoring software applications to produce an aesthetically acceptable product that meets specific objectives. Meets the needs of educational media, corporate training, and communications specialists.

COMM 445 - Cinematic Directors

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: COMM 150 or instructor permission

Analyzes examples of classical cinematic techniques, identifies, through research and watching film, classical techniques of cinema as well as the preproduction, production, and post-production required to successfully utilize them. Offers a context and critical tools for a better understanding of the moving image in its different manifestations.

COMM 449 - Advanced Audio Recording Techniques

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: COMM 249, permission

Sound recording utilizing advanced techniques and concentrating on specific applications. Students participate in an intensive lab experience utilizing the most advanced equipment available. Emphasizes application, editing, signal processing, and multitrack recording. Student is expected to produce a sound recording for a specific use of professional quality. May be offered under a different topic area such as: COMM 449 Advanced Audio Recording Techniques: Music Recording or COMM 449 Advanced Audio Recording Techniques: Instructional Media. May be repeated for a maximum of six credits under a different topic area. Students who need to D/F repeat COMM 449 may repeat the course under a different variable title.

COMM 451 - Multimedia News Production

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: COMM 251 or permission

Engages in reporting and presenting broadcast news programs. Content and assignments include analysis of news and public affairs broadcasting.

COMM 460 - Disturbing Trends in Communication Technology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COMM 150

Examines recent and developing trends in media technology, with particular attention to technologies and applications that come at some social cost. Engages in the broader cultural debates surrounding technologies and their use. Draws on historically rooted ethical frameworks to assess how we can develop and implement new technologies that are responsible in their real-world applications.

COMM 470 - Media Management and Sales

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COMM 150

Explores two essential functions of contemporary media: management of media organizations and content, and providing economic viability to media outlets through the selling of commercial time and space to clients. Investigates the fundamental theories and principles of managing media organizations as well as sales strategies including the use of audience ratings and analytics. Examines the process of researching media organizations and developing strategies to sell media content to clients.

COMM 471 - Advanced Image Editing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COMM 271 or permission

An introduction to the use of electronic still photography (ESP) for the capture, recording, and transfer of still images and the use of computers for the storage, manipulation, and output of color and black and white photography. Extensive training in the use of software packages for image enhancement, restoration, and manipulation is provided. Students learn the applications of this technology to the print media and examine the ethical and legal issues of image manipulation.

COMM 474 - Commercial Photography

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Develops abilities in the practice and application of commercial and editorial photography. Provides an understanding of the business of being a freelance photographer, as well as opportunities for collaborations and individual assignments.

COMM 475 - Senior Portfolio Presentation

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Prerequisite: Communications media majors only and COMM 395

Students compile and present a series of works produced through previous communications media courses and activities. The result is a portfolio suitable for presentation to a potential employer. The portfolio may include examples of student works from a variety of subject areas.

COMM 477 - Freelancing and Entrepreneurship in Media

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: COMM Major or Minor, Junior standing

Explores the professional fields of freelance, enterprise start-up and entrepreneurship in media and communication. Surveys professional, financial and legal responsibilities for freelance and self-employed media professionals. Identifies and compares different types of freelance and media businesses to develop business plans.

COMM 480 - Seminar in Communications Media

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Junior or senior standing, other Prerequisites as appropriate to course content

A seminar in selected communications issues or problems. Includes the reading and review of the current literature as appropriate to the major topic presented in the seminar.

COMM 481 - Special Topics

Class Hours: var
Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 481 are primarily for upper-level undergraduate students.

COMM 493 - Internship

Credits: 9

Prerequisite: COMM 395, 2.0 overall GPA and department approval

Supervised professional summer work experience in communications media. Internship sites reflect the academic goals of the department and are approved and administered by a department coordinator. Location, duties, duration of internship, and work hours are tailored to students' career goals. Sites represent a broad spectrum of communications and media in business, education, health, or other agencies. Students must complete 360 hours of internship work experience and a culminating internship project. A maximum of 15 credits of internship and/or practicum are permitted toward a degree program. Students whose internship responsibilities include regular contact with minors are required to take the Protection of Minors Training. All internship sites are required to be compliant with University internship policies and requirements.

Computer Science

COSC 101 - Computer Literacy

Class Hours: 3
Lab/Discussion: 0
Credits: 3

An introductory course providing fundamental understanding of computers. Familiarizes students with the interaction of computer hardware and software. Emphasizes the application of microcomputers, the use of productivity software (word processing, spreadsheet management, file and database management, presentation graphics, web browsers, search strategies, and e-mail), and the social and ethical aspects of the impact of computers on society. (Does not count toward computer science major.) Note: cross-listed as BTED/IFMG 101. Any of these courses may be substituted for each other and may be used interchangeably for D/F repeats but may not be counted for duplicate credit.

COSC 105 - Fundamentals of Computer Science

Class Hours: 3
Lab/Discussion: 0
Credits: 3

The first course for computer science majors. Required of all computer science students; appropriate for other Natural Sciences and Mathematics students. Topics include the fundamental concepts of computer architecture, algorithm development and analysis, programming languages, software engineering, data organization and representation, and systems software. A hands-on introduction to computer usage with an emphasis on terminology and the underlying connections within the discipline.

COSC 108 - Introduction to Programming via Alice

Class Hours: 3
Lab/Discussion: 0
Credits: 3

An introduction to the development of algorithmic solutions to a variety of problems and the development of computer programs to implement the solutions. The Alice programming language and interactive development environment is incorporated to introduce fundamental algorithmic/programming concepts including variables, assignments, conditionals, loops, functions, and arrays through an interactive movie animation paradigm. These concepts are then applied to a standard programming language. Includes an introduction to the Java programming language. (May not receive credit for both COSC 108 and COSC 110.)

COSC 110 - Problem Solving and Structured Programming

Class Hours: 3
Lab/Discussion: 0
Credits: 3

An introduction to the development of algorithmic solutions to a variety of problems and the development of computer programs to implement the solutions. Explores standard programming structures used to introduce fundamental algorithmic/programming concepts including variables, assignments, conditionals, loops, functions, and arrays and their role in problems solving. Emphasizes structured programming in the development of algorithm solutions to common problems. Object-oriented paradigm is introduced at a basic level.

COSC 143 - Cyber Wellness

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Investigates the different categories of cyber wellness and how they affect emotional, physical, social, and intellectual wellness. Focuses on demonstrating intellectual agility and creativity in order to maintain physical wellness while using technology. Examines the effect technological changes have had on various disciplines and their impacts on society in relation to health and wellness. Discusses theories and principles related to the physical, mental, social, and emotional aspects of personal computer usage including cyberspace. Completion of COSC 143 fulfills the Liberal Studies Dimensions of Wellness requirement. Other 143 courses will also fulfill this requirement, and any of these courses may be substituted for each other and may be used interchangeably for D/F repeats but may not be counted for duplicate credit.

COSC 210 - Object-Oriented and GUI Programming

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: COSC 108 or COSC 110

An in-depth introduction to the Object-Oriented Programming (OOP) paradigm, including encapsulation, inheritance, and polymorphism. Focuses on designing, implementing, and using objects. Includes an introduction to Graphical User Interface (GUI) design and programming.

COSC 216 - Introduction to Cyber Security

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: COSC 110

Introduces the fundamental theory and concepts for cybersecurity including security principles, ethical and professional issues in cybersecurity, attack strategies, risk management, access control, integrity management, cryptography basics, security protocols, and strategies for defending computers and networks. Includes practical hands-on learning activities to enhance understanding and to apply the theory and concepts.

COSC 220 - Applied Computer Programming

Class Hours: 4
Lab/Discussion: 0
Credits: 4

Prerequisite: COSC 110 or equivalent

Structured programming principles and techniques, as implemented through the ANSI COBOL language; program design using top-down techniques; program and project documentation; introduction to sequential and random file algorithms and integrated file systems.

COSC 281 - Special Topics

Class Hours: var
Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 281 are offered primarily for lower-level undergraduate students.

COSC 300 - Computer Organization and Assembly Language

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: COSC 110 or equivalent

A discussion of the basic computer architecture elements: gates, combinational and sequential logic, hardware arithmetic, CPU, and memory structure. An examination of the languages of machines: representation of data, addressing techniques, symbolic coding, assembly, and linking. Problem solving using assembly language.

COSC 310 - Data Structures and Algorithms

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: COSC 210

Fundamental concepts of data design and implementation, data abstraction, data structures, arrays, linked-lists, stacks, queues, recursion, trees, graphs, and hashing. Also covers sorting algorithms, divide and conquer techniques, greedy methods, and analysis of algorithms. The object-oriented paradigm is employed using an object-oriented language.

COSC 319 - Software Engineering Concepts

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: COSC 310 or instructor permission

Software engineering concepts include the collection of tools, procedures, methodologies, and accumulated knowledge about the development and maintenance of software-based systems. Strongly suggested for any student planning to take an internship in computer science. After an overview of the phases of the software life cycle, current methodologies, tools, and techniques being applied to each phase are discussed in depth with localized exercises given to reinforce learning of concepts.

COSC 341 - Introduction to Database Management Systems

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COSC 110, COSC 210

Provides fundamental knowledge of, and practical experience with, database concepts. Includes study of information concepts and the realization of those concepts using the relational data model. Practical experience gained in designing and constructing data models and using SQL to interface to both multiuser DBMS packages and to desktop DBMS packages.

COSC 343 - Introduction to Numerical Methods

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COSC 110, MATH 121 or MATH 125

Algorithmic methods for function evaluation, roots of equations, solutions to systems of linear equations, function interpolation, numerical differentiation, and integration and use of spline functions for curve fitting. The focus is on managing and measuring errors in computation. Also offered as MATH 343; either COSC 343 or MATH 343 may be substituted for the other and may be used interchangeably for D/F repeats but may not be counted for duplicate credit.

COSC 345 - Computer Networks

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COSC 110; MATH 121 or MATH 125; and MATH 214 or MATH 216 or MATH 217; or equivalents

Covers data communications, computer network architectures, functions of various network layers, communication protocols, internetworking, emerging high-speed networks.

COSC 355 - Computer Graphics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grade of "C" or better in COSC 310 and junior status

Introduces computer graphics hardware and software. Explores and implements 2-D and 3-D modeling and transformations, viewing transformations, projections, rendering techniques, lighting, and shading using a current cross-platform 3-D graphics API. Includes creation of complex, photorealistic images, and animation principles.

COSC 356 - Network Security

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COSC 216 and either COSC 345 or COSC 352 /IFMG 352

Explores mechanisms for protecting networks against attacks. Emphasizes network security applications that are used on the Internet and for corporate networks. Investigates various networking security standards and studies methods for enforcing and enhancing those standards.

COSC 362 - Unix Systems

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COSC 310 or instructor permission

An introduction to the features, syntax, applications, and history of Unix. Coverage includes utilities, system administration, development environments, and networking concerns including distributed systems, client-server computing, and providing Web services.

COSC 365 - Web Architecture and Application Development

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COSC 310 and COSC 341 or instructor permission

Covers the fundamental architecture of Internet systems and the process of developing computer applications running on the Internet in general and on the World Wide Web in particular. Students gain a basic understanding of the TCP/IP protocols and the client/server technology. Methods, languages, and tools for developing distributed applications on the Internet are evaluated. Programming projects developing distributed applications, using a representative suite of development tools and languages, are an integral part of this course.

COSC 380 - Seminar on the Computer Profession and Ethics

Class Hours: 2

Lab/Discussion: 0

Credits: 2

Prerequisite: Instructor permission

Reading, review, and discussion of the current literature of computer science and industry trade journals; effective oral presentations; employment prospects. Topics on computer ethics and review of case studies on computer ethics from professional journals with discussion of the issues involved. Should be taken the semester before an internship or the first semester of the senior year. Should not be taken at the same time as COSC 480.

COSC 405 - Artificial Intelligence

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grade of "C" or better in COSC 310

Introduces the field of artificial intelligence. Explores and implements solutions using classical and modern artificial intelligence techniques. Includes state space search, logical inference, expert systems, optimization, knowledge representation, machine learning, handling uncertainty, and soft computing.

COSC 410 - Computer Architecture

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COSC 300, COSC 310

Introduces the underlying working principles of electronic computers. Discusses the organization and architecture of computer components. Expounds on details of memory hierarchy, I/O organization, computer arithmetic, processor and control unit design, instruction set architecture, instruction-level parallelism, and the ways functional components interact together.

COSC 420 - Modern Programming Languages

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COSC 310

A comparative survey of programming language paradigms. Includes an examination of the properties, applications, syntax, and semantics of selected object-oriented, functional, and declarative programming languages.

COSC 424 - Compiler Construction

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COSC 300, COSC 310

Relates the formal concepts of automata and language theory to the practicality of constructing a high-level language translator. The structures and techniques used in lexical analysis, parsing, syntax-directed translation, intermediate and object code generation, and optimization are emphasized.

COSC 427 - Introduction to Cryptography

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COSC 310 and MATH 309

Fundamental concepts of encoding and/or encrypting information, cryptographic protocols and techniques, various cryptographic algorithms, and security of information are covered in depth.

COSC 429 - Digital Forensics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COSC 110 or equivalent programming course, junior standing or instructor permission

Takes a detailed, hands-on approach to the use of computer technology in investigating computer crime. From network security breaches to child pornography, the common bridge is the demonstration that particular electronic media contains incriminating evidence. Using modern forensic tools and techniques, students learn how to conduct a structured investigative process to determine exactly what happened and who was responsible, and to perform this investigation in such a way that the results are useful in criminal proceedings. Real-world case studies are used to provide a better understanding of security issues. Unique forensics issues associated with various operating systems including Linux/Windows operating systems and associated applications are covered.

COSC 430 - Introduction to Systems Programming

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grade of "C" or better in COSC 300 and COSC 310 or instructor permission

An in-depth introduction to a systems programming, system programming language(s) and application of those language(s) to systems-level problems. The focus is on programming constructs that are closely aligned with the architecture of a digital computer including those providing portability between platforms, dynamic allocation and management of virtual memory, complex in-memory data structures, reading/writing binary data using sequential and random access, pointer arithmetic/manipulation, and interaction between threads/processes.

COSC 432 - Introduction to Operating Systems

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COSC 300, COSC 310 or equivalents

An introduction to the principles of operating system design and implementation. Topics include interrupt service, process states and transitions, spooling, management of memory and disk space, virtual storage, scheduling processes and devices, and file systems.

COSC 454 - Information Assurance Administration

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COSC 216 or instructor permission

Explores the various issues pertinent to maintaining acceptable levels of information security within organizations. Addresses issues involved in administering and managing information security systems. Intended to raise awareness of information security issues across organizations.

COSC 460 - Theory of Computation

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COSC 310 or instructor permission

Formal methods for describing and analyzing programming languages and algorithms. Covers Backus-Naur forms, productions, regular expressions, introduction to automata theory, Turing machines, and recent concepts in algorithm theory computability.

COSC 465 - Distributed Processing and Web Services

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COSC 365 or COSC 310 and instructor permission

An advanced study into architecture of Internet systems and the process of developing distributed computer applications running on the Internet and/or other networks. Presents an in-depth understanding of distributed processing technologies including socket programming, RPC, RMI, EJBs, DCOM, .NET, SOAP, and Web services. Emphasis is placed on the use of XML to support multi-party heterogeneous distributed applications and includes XML fundamentals (e.g., DTDs, XML schemas, XPath, XSLT, SAX, and DOM), and Web services (e.g., SOAP, WSDL, UDDI, and ebXML). Students complete hands-on projects utilizing mentioned technologies.

COSC 473 - Software Engineering Practice

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COSC 319 or instructor permission

Planning, design, and implementation of large software systems using software engineering techniques. Students work on project teams on real or realistic software development projects. Credit for either COSC 473 or COSC 493, but not both, may count toward computer science major requirements for graduation; the other course credits will be counted as free electives.

COSC 480 - Seminar on Technical Topics

Class Hours: 0

Lab/Discussion: 1

Credits: 1

Prerequisite: See text below

Reading, review, and discussion of the current literature of computer science and industry professional and technical journals; oral presentations. Should be taken the last semester of the senior year. Should not be taken at the same time as COSC 380.

COSC 482 - Independent Study

Class Hours: var

Credits: 1-4

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

Students with interest in independent study of a topic not offered in the curriculum may propose a plan of study in conjunction with a faculty member. Approval based on academic appropriateness and availability of resources.

COSC 493 - Internship in Computer Science

Class Hours: var

Credits: 6-12

Prerequisite: COSC 105, COSC 220 (except Languages and Systems Track), COSC 300, COSC 310, COSC 319, COSC 341, COSC 380, other courses depending on type of internship position desired, completion of application, and selection by a faculty committee. COSC 319, COSC 341, and COSC 380 Prerequisite may be waived when registering for first 6cr.

Positions with participating companies provide students with paid experience in computer science under supervision of the companies and faculty. Requirements include three on-site consultations (one during first 6cr and two in final 6cr), two university consultations (one during first 6cr and one in final 6cr), completion of progress reports, oral presentation (final 6cr only), and a final cumulative paper (final 6cr only). An internship is offered only to students who have completed their sophomore year. No more than 3cr of the first 6cr of COSC 493 and 3cr of the last 6cr of COSC 493 may be applied toward the credit-hour requirement for a major in computer science. Internship can be completed as one 12cr unit over a minimum of 23 weeks or in 6cr units each over a minimum of 12 weeks. (Writing-intensive course. As such, an internship requires completion of designated writing-intensive components.)

Counselor Education

COUN 253 - Counseling in School Settings

Class Hours: 3

Lab/Discussion: 0

Credits: 3

An elective course providing in-service teachers and school personnel, other than counselors, with a basic understanding of the knowledge, information, and skills appropriate to counseling with individuals and groups. Restricted to peer tutors.

Criminology

CRIM 101 - Crime and Justice Systems

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces the field of criminology through the examination of historical data, statistical information, theories of criminal causation, social control of behavior, development of laws, evaluation of criminal justice system policies, procedures, and trends. Emphasizes terminology of the field, an awareness of the methods of inquiry utilized in the field, and examination of personal attitudes and values regarding crime and responses to crime.

CRIM 102 - Survey of Criminology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Provides an understanding of the discipline of criminology through an examination of its theories, basic assumptions, and definitions.

CRIM 205 - Policing and the Community

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: CRIM 101 or CRIM 102

Introduces the history, function, and role of policing in American society. The multidimensional work of policing is emphasized with particular attention to strategies employed to combat and prevent crime through computer technology and advancements in nonlethal and lethal methods. Organizational and personal selections also are covered, as these are intimately connected to the structure and composition of the communities serviced. Practical and critical approaches to law enforcement are undertaken to explore prevailing and dissenting perspectives on the issues covered.

CRIM 210 - Criminal Law

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: CRIM 101 or CRIM 102 or departmental permission

A study of the history and sources of criminal law coupled with an analysis of the substantive elements of specific crimes.

CRIM 215 - Survey of Courts and the Criminal Justice System

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: CRIM 101 or CRIM 102 or departmental permission

Examines the historical background, the traditions, and the legal principles that underlie the courts as an integral component of the American system of criminal justice. Both differences and similarities inherent within the state and federal court processes are analyzed, and the procedures through which the criminal courts uphold the basic rights and liberties of all United States citizens, both victims and the accused, are explored. The dynamics of the judiciary are considered through examination of the critical foundation of the judicial process. A primary focus is placed on understanding the respective roles played by judges, prosecuting attorneys, defense counsel, police, probation officers, and other court-related personnel in the criminal court process.

CRIM 225 - Survey of Corrections

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: CRIM 101 or CRIM 102 or departmental permission

States and emphasizes the role of corrections in the social control of human behavior. Includes the history of corrections, classic and contemporary thought about the role of corrections in the criminal justice system, and a survey of correctional methods and alternatives with an emphasis on the use of incarceration.

CRIM 235 - Survey of Juvenile Justice and Juvenile Law

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: CRIM 101 or CRIM 102 or departmental permission

Provides an understanding of the juvenile justice system and the various cases and legislative initiatives that have affected juvenile justice policy, in addition to examining the evolution of the juvenile justice system and the transformation of the current issues in juvenile justice in the United States. Attention is also focused on juvenile justice policies and procedures in other countries.

CRIM 255 - Law, Social Control, and Society

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: CRIM 101 or CRIM 102 or departmental permission

The evolution and development of the modern legal system. Topics include civil, criminal, and administration law, the legal profession, legal systems in American society, and the law as one of many instruments of social control and social change.

CRIM 281 - Special Topics

Class Hours: var
Credits: 1-3

Prerequisite: CRIM 101 or CRIM 102 or departmental permission

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 281 are offered primarily for lower-level undergraduate students.

CRIM 306 - Criminological Research Methods

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: CRIM 101, CRIM 102, junior standing

An introduction to the basic criminological research methods designed to prepare the student to understand and participate in quantitative and qualitative research.

CRIM 321 - Cybersecurity and Loss Prevention

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: CRIM 101 or CRIM 102

Addresses the cybersecurity threat from a more comprehensive standpoint. Challenges students to recognize and understand security concerns from multiple perspectives, ranging from the insider threat to threats involving the actual physical components. Exposure to a design methodology, associated system components modules, and basic security principles is featured. Students also are exposed to the private and public responses to computer security problems, including the insider threat, domestic and foreign terrorism, and a number of unique computer crimes and solutions to deal with these crimes. The importance of a sound security policy in the overall management of any organization is addressed.

CRIM 323 - Cybersecurity and the Law

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: CRIM 101 or CRIM 102

Examines the scope of cybercrime and its impact on today's system of criminal justice. Includes cybercrime and the Bill of Rights, computer-based economic crime, electronic commerce, ethical challenges, and the Computer Fraud and Abuse Act. Includes an analysis of the legal considerations facing law enforcement and cybersecurity professionals who deal with the problem of discovering, investigating, and prosecuting cybercrime.

CRIM 344 - Terrorism

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: CRIM 101 or CRIM 102 or instructor permission

An in-depth study of the legal and international issues that the United States faces in response to combating international terrorism. The emphasis is placed on identifying causes of terrorism and the most plausible threats; terrorist networks, their commonalities and differences, and the difficulty in countering; and determining appropriate responses, to include political and legal implications, threat analysis, physical security, and target hardening. (Also offered as PLSC 344; may not be taken as duplicate credit.)

CRIM 354 - White-Collar Crime

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: CRIM 101 or CRIM 102

An introduction to various topics and issues relating to white-collar crime. Theories and measurements of white-collar, corporate, organizational, occupational, workplace, and organized crimes are presented and compared. Prevention, legal issues, and control strategies are presented.

CRIM 374 - Environmental Crime and Justice

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: CRIM 101 or CRIM 102

Introduces the developing area of criminological solutions to environmental problems. Issues addressed include the nature of environmental offenders and victims, the variety of approaches to achieving environmental justice, and criminal justice solutions to specific environmental problems.

CRIM 384 - Violence and Victimology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: CRIM 101 or CRIM 102

Introduces the leading theories and research in the area of violent criminal behavior and victimization. A special emphasis is on patterns of violent offending and victimization over time, victim-offender relationships, and the experience of victims in the criminal justice system. Addresses major violent crimes including murder, rape, robbery, and assault.

CRIM 394 - Crime and Delinquency Prevention

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: CRIM 101 or CRIM 102 or departmental permission

Examines various crime and delinquency prevention policies and programs. Topics include the historical development of crime and delinquency prevention methods, theoretical applications to prevention efforts, and research findings on program effectiveness. The importance of research design in evaluating prevention programs also is considered.

CRIM 400 - Theoretical Criminology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: CRIM 101, CRIM 102, junior standing

A review and critical analysis of the major criminological theories beginning with the Classical School; psychological, sociological, economic, biological, and political theories of crime and its causes are included.

CRIM 401 - Contemporary Issues in Criminology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: CRIM 101, CRIM 102, junior standing

An examination of the nature and extent of crime in modern western society. Emphasizes issues selected from, but not limited to, emerging patterns of violence, organized crime, white-collar crime, victimless crime, corruption, and those crime control strategies deemed appropriate in a democracy.

CRIM 403 - Dilemmas in Criminology and Criminal Justice

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: CRIM 101, CRIM 102, junior standing

An overview of prominent ethical issues facing professionals in criminology and criminal justice, with an emphasis on encouraging individual students to explore their own ethical and moral systems and how they make ethical/moral decisions. Primarily discussion/seminar oriented.

CRIM 410 - Race, Ethnicity, Social Structure, and Crime

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: CRIM 101, CRIM 102

Introduces the art of thinking critically about the social construction of race, ethnicity, and social class in crime and crime control, with special focus on the United States.

CRIM 420 - Media Portrayal of Crime

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: CRIM 101, JRNL 105, or COMM 101, or departmental permission

An examination of the portrayal of crime in the media (television, film, newspapers, music, video games, electronic/Internet). This includes, but is not limited to, victims, offenders, criminal justice actors, and the criminal justice system. Of importance is how the media select what is newsworthy and how they describe and/or alter criminal justice issues. Attention is paid to the media's influence on perceptions of crime, the ethics behind the media's perceptual influence, criminology and criminal justice issues of the general population and the resultant criminal justice policies. Seminar based. (Also offered as COMM 420; may not be taken as duplicate credit.)

CRIM 450 - Women and Crime

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: CRIM 101 or CRIM 102

A study of the nature and extent of women's crime, theories of female criminality, processing of women offenders through the criminal justice system, the response of police and court officials to women as victims of crime, and opportunities for women as employees in criminal justice agencies.

CRIM 470 - Comparative Study of Justice

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: CRIM 101 or CRIM 102

A comparison of American systems of administration of justice with those of other nations.

CRIM 482 - Independent Study in Criminology

Class Hours: var

Credits: 1-3

Prerequisite: CRIM 101, CRIM 102, prior approval through advisor, faculty member, and Office of the Provost

Students with interest in independent study of a topic not offered in the curriculum may propose a plan of study in conjunction with a faculty member. Approval is based on academic appropriateness and availability of resources.

CRIM 493 - Internship

Class Hours: var

Credits: 3-12

Prerequisite: CRIM 101, CRIM 102, 12cr from CRIM courses, 2.5 overall GPA, and junior standing

A structured field placement designed to broaden the educational experience through observation and participation in work assignments in government or private sectors. Six credits can be applied to the major requirements.

Critical Languages

CRLG 101 - Arabic I

Credits: 3

Basic vocabulary and pronunciation in the target language. Oral/aural skills are stressed

CRLG 101-120 - Critical Languages I

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Basic vocabulary and pronunciation in the target language. Oral/aural skills are stressed.

CRLG 109 - Korean I

Credits: 3

Basic vocabulary and pronunciation in the target language. Oral/aural skills

CRLG 112 - Russian I

Credits: 3

Basic vocabulary and pronunciation in the target language. Oral/aural skills

CRLG 113 - Swedish I

Credits: 3

Basic vocabulary and pronunciation in the target language. Oral/aural skills

CRLG 151 - Arabic II

Credits: 3

Prerequisite: CGLG 101 or acceptable equivalent

A continuation of the first-semester course. Depending on the language being studied, reading and writing may be introduced at this level

CRLG 151–170 - Critical Languages II

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Level I or acceptable equivalent

A continuation of the first-semester course. Depending on the language being studied, reading and writing may be introduced at this level.

CRLG 159 - Korean II

Credits: 3

Prerequisite: CRLG 109 or acceptable equivalent

A continuation of the first-semester course. Depending on the language being studied, reading and writing may be introduced at this level

CRLG 162 - Russian II

Credits: 3

Prerequisite: CRLG 112 or acceptable equivalent

A continuation of the first-semester course. Depending on the language being studied, reading and writing may be introduced at this level

CRLG 163 - Swedish II

Credits: 3

Prerequisite: CRLG 113 or acceptable equivalent

A continuation of the first-semester course. Depending on the language being studied, reading and writing may be introduced at this level

CRLG 201 - Arabic III

Credits: 3

Prerequisite: CRLG 151 or acceptable equivalent

A continuation of the first-semester course. Depending on the language being studied, reading and writing may be introduced at this level

CRLG 201-220 - Critical Languages III

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Level II or acceptable equivalent

At this first intermediate level, students begin to develop a degree of oral proficiency that varies with the language studied. Reading and writing are studied in all languages by this level.

CRLG 209 - Korean III

Credits: 3

Prerequisite: CRLG 159 or acceptable equivalent

CRLG 212 - Russian III

Credits: 3

Prerequisite: CRLG 162 or acceptable equivalent

CRLG 251 - Arabic IV

Credits: 3

Prerequisite: CRLG 201 or acceptable equivalent

By the end of this course, the student should be able to communicate in simple terms with an educated native speaker on a topic with which the student is familiar. Ability in reading and writing varies with language

CRLG 251-270 - Critical Languages IV

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Level III or acceptable equivalent

By the end of this course, the student should be able to communicate in simple terms with an educated native speaker on a topic with which the student is familiar. Ability in reading and writing varies with language.

CRLG 259 - Korean IV

Credits: 3

Prerequisite: CRLG 209 or acceptable equivalent

By the end of this course, the student should be able to communicate in simple terms with an educated native speaker on a topic with which the student is familiar. Ability in reading and writing varies with language

CRLG 262 - Russian IV

Credits: 3

Prerequisite: CRLG 212 or acceptable equivalent

By the end of this course, the student should be able to communicate in simple terms with an educated native speaker on a topic with which the student is familiar. Ability in reading and writing varies with language

Dance

DANC 102 - Introduction to Dance

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Explores dance as communication, ritual, social engagement, entertainment, and as an art form. Dance history, genealogy, aesthetics, critical analysis and response, and the creative process are examined. Class experience includes viewing and critical analysis of professional dance works, attending at least two live productions, and engaging in the creative process in practice and performance.

DANC 150 - Fundamentals of Dance

Class Hours: 3
Lab/Discussion: 0
Credits: 3

A basic dance technique that sequentially develops the elements of movement (space, time, force) into a variety of dance genres and period styles. Covers special care and safety of the instrument—the body.

DANC 250 - Beginning Modern Dance

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Beginning modern dance technique. An introduction to the beginning elements of the choreographic process. Examines the historical development and cultural influences on the changing philosophies of modern dance performance. Performance of creative work required.

DANC 260 - Beginning Jazz Dance

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Beginning jazz technique, dynamics, and selected styles that reflect an era or culture characteristic of jazz movement and music from the 1920s through the present. An introduction to the beginning elements of the choreographic process. Performance of creative work required.

DANC 270 - Beginning Ballroom and Tap Dance

Class Hours: 3

Lab/Discussion: 0

Credits: 3

A sequential development of beginning tap and ballroom dance techniques in the context of the historical development and period styles. Performance of creative work is required.

DANC 280 - Beginning Ballet

Class Hours: 3

Lab/Discussion: 0

Credits: 3

A sequential development of beginning barre and center techniques that progress to link movement phrasing into dance sequences and choreography. The historical periods of development and the status of the art today are examined in a cultural context, which includes gender and minority influences. Performance of creative work is required.

DANC 281 - Special Topics

Class Hours: var

Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 281 are offered primarily for lower-level undergraduate students.

DANC 290 - Ethnic Dance

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Includes dance techniques from a variety of indigenous forms from western and eastern cultures. Presented in the historical and social context. An emphasis is given to the needs of theater production.

DANC 351 - Choreography

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Three introductory- or advanced-level dance classes from DANC 250, DANC 260, DANC 270, DANC 280, DANC 290, DANC 485, or instructor permission

Introduces the necessary choreographic tools needed to manipulate dance as a medium to create dance works. Students learn and use various approaches to the choreographic process to create dance works, one of which will be presented in a public showing at the end of the semester.

DANC 353 - Dance Curriculum and Instruction

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Three introductory- or advanced-level dance classes from DANC 250, DANC 260, DANC 270, DANC 280, DANC 290, DANC 485, or instructor permission

Introduces the necessary teaching skills and curriculum development needed to understand the pedagogical structure for teaching dance. Students learn the approaches to teaching that are unique to dance and will learn to design dance curriculum.

DANC 355 - Dance Production: Administration to Creation

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Two introductory- or advanced-level dance classes from DANC 250, DANC 260, DANC 270, DANC 280, DANC 290, DANC 485, or instructor permission

A sequential development of the dance production process from audition to opening, focusing on the practical application to private studio and academic and professional settings. Explores the evolution of dance production and the future of dance, from both administrative and artistic perspectives, taking into consideration the constantly changing world of technology.

DANC 485 - Dance Studio

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: DANC 250 or DANC 260 or DANC 270 or DANC 280 (beginning technique class taken must be the specific dance genre of the Dance Studio class offered); or by instructor permission

Furtheres the development of the dancer at the intermediate level of a specified genre of dance. Development in dance requires the integration of both technique and artistic development. The specific genres vary from semester to semester, including modern, ballet, tap, and jazz as alternating semester options. May be repeated with a different focus each time.

Disability Services

DISB 201 - Customized Employment: Disability Awareness

Class Hours: 3

Lab/Discussion: 0

Credits: 3

A historical perspective and stereotypical treatment of persons with disabilities, the impact of community integration and empowered living for persons with disabilities, the capabilities and challenges faced by persons with various disabilities. Also considers how current issues, such as health care, housing, Social Security, and employment, have on the lives of persons with disabilities.

DISB 302 - Customized Employment: Service Coordination

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: DISB 201

An overview of the Intellectual and Developmental Disability Service System, consumer-controlled services and available waivers for persons with disabilities. Also makes the distinction between supported employment and customized employment and the supports available in print, via the Intellectual and Developmental Disability Service System agencies and legislation.

DISB 369 - Education of Persons with Emotional/ Behavioral Disorders, Learning Disabilities, or Brain Injury**Class Hours:** 3**Lab/Discussion:** 0**Credits:** 3

Focuses on major theoretical positions regarding etiology of emotional/ behavioral disorders, learning disabilities and brain injury; definition and identification of the populations; and educational approaches. Reviews research in the field, including current issues, trends, educational practices, and services. Uses a variety of instructional approaches (e.g., cooperative learning, simulations, role-playing) to facilitate acquisition of new knowledge and skills. (Also offered as EDEX 369; may not be taken for duplicate credit.)

DISB 378 - Education of Persons with Intellectual/Developmental Disabilities and Physical/Multiple Disabilities**Class Hours:** 3**Lab/Discussion:** 0**Credits:** 3

Focuses on major theoretical positions regarding etiology of intellectual disabilities, developmental disabilities, a wide and diverse range of physical/multiple disabilities, and other health impairments. Discusses definitions, population characteristics, and educational approaches. Reviews research in the field, including current issues, trends, practices, and services. (Also offered as EDEX 378; may not be taken for duplicate credit.)

DISB 403 - Customized Employment: Assessment and Job Development**Class Hours:** 3**Lab/Discussion:** 0**Credits:** 3**Prerequisite:** DISB 302

A holistic approach to providing job-coach services in community setting. Content emphasizes understanding the processes involved in bringing a consumer through the Vocational/Transition Assessment process, developing and analyzing potential jobs based on consumer assessment data, the development and implementation of accommodations for consumers with behavioral/psychiatric disorders, as well as the impact the American with Disabilities Act has on the provision of Job Coaching services.

DISB 404 - Customized Employment: Systematic Instruction and Fading**Class Hours:** 3**Lab/Discussion:** 0**Credits:** 3**Prerequisite:** DISB 403

A holistic approach to providing job coach services in community setting. Content emphasizes understanding the three essential components of systematic instruction, the development and implementation of instructional programs that include comprehensive fading and follow-up plans and the collection, graphing, and analysis of the assessment, instructional, and follow-up data.

DISB 440 - Ethical and Professional Behaviors

Class Hours: 1
Lab/Discussion: 0
Credits: 1

Prerequisite: Disability services major, junior standing, 2.75 GPA

Emphasizes the professional standards and ethical behaviors of disability services professionals. Covers information about and the laws surrounding the ages of birth to three years and over 21 years of age. Students are exposed to the wide range of services in which they can be employed.

DISB 493 - Internship/Field Training

Class Hours: var
Credits: 12

Prerequisite: DISB 440 and 2.75 GPA

Allows the intern to demonstrate competencies working in a public or private agency providing educational/rehabilitation services. This may include, but not be limited to, writing and analyzing comprehensive evaluation reports, counseling individuals with disabilities, understanding agency and/or service delivery responsibilities and limitations, referral and follow-up processes, and use of various assessment approaches in evaluating an individual's capacity to function independently in a broad range of community settings. (Offered as EDEX 493 before 2017-18.)

Developmental Studies

DVST 070 - Reading Skills for College Study

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Assists in the development of college-level reading skills with an emphasis on textbook reading. Includes literal and critical comprehension skills, vocabulary development, and reading efficiency. Carries institutional, nondegree credit. It counts toward financial aid and full-time status, but not toward graduation or GPA. *Note:* Students who score 250 and below on the ACCUPLACER post-test (administered at the end of this course) are required to enroll in DVST 110 the following semester.

DVST 083 - Introduction to College Math

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: May not be taken after successfully completing any course offered by the Mathematics Department without written approval of the Department of Developmental Studies chairperson

For students who need to develop the basic mathematical skills that are essential to success in more advanced college-level work. Content material includes computational skills of whole numbers, fractions, percent, data analysis, graphs, statistics, properties and operations on real numbers, simplifying algebraic expressions, and solving equations and inequalities. Carries institutional, nondegree credit. (Offered as DVST 095 before 2015-16.)

DVST 093 - Developmental Mathematics, Elements of Algebra

Class Hours: 1
Lab/Discussion: 0
Credits: 1

Prerequisite: May not be taken after successfully completing any course offered by the Mathematics Department without written approval of the Department of Developmental Studies director

Introduces algebraic concepts and algorithms with a comparison of arithmetic algorithms to associated algebraic algorithms. Topics include

properties and operations on real numbers, simplifying expressions, order of operations, solving equations and inequalities, formulas, exponential and scientific notation, and operations on polynomials. Carries institutional, nondegree credit. Attendance is required.

DVST 110 - Introduction to Critical Reading and Thinking

Class Hours: 2

Lab/Discussion: 0

Credits: 2

Note: Students enrolled in DVST 070 who score 250 and below on the ACCUPLACER post-test (administered at the end of DVST 070) are required to enroll in DVST 110 the following semester. Open for enrollment for any student.

Focuses on the development and mastery of skills related to the processes of understanding, analyzing, and assessing college-level texts and other academic readings. Synthesizes written information from a variety of sources and content areas. Note: For sections paired with specific content-area course sections, students are required to register for both courses.

DVST 150 - Introduction to Higher Education

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Introduces the system of higher education and skills that promote effective educational planning and academic success. Orients students to the systems, resources, policies, and procedures of IUP and to the Liberal Studies curriculum. Emphasizes goal setting, decision making, self-monitoring, and time-management skills.

DVST 160 - Learning Strategies

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Encourages students to develop and use effective and efficient study strategies on a consistent basis. Students examine academic goals and implement study strategies to help achieve those goals. Includes the topics of goal setting and self-monitoring, learning styles, test preparation and test taking, lecture and textbook note taking, time management and concentration, and general strategies for learning. Students are required to give evidence of application of the study strategies to other courses in which they are currently enrolled. Active participation in class meetings is expected.

DVST 170 - Career Exploration

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Introduces the theoretical and practical framework with which to explore careers compatible with overall academic skills, aptitudes, and life goals. Students examine the world of work, assess their interests and abilities, and make realistic decisions on academic majors and careers. (Cross-listed as ADVT 170. These courses may be substituted for each other and be used interchangeably for D/F repeats but may not be counted for duplicate credit.)

DVST 200 - Academic Transition Seminar

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Prerequisite: Recommended for students from regional campuses

Acclimates the student to the curricular and cocurricular experience of the main campus of IUP. Emphasizes campus systems and resources, the

application of theories of change as related to transition, and major and career planning as lifelong learners. Recommended for transfer students, particularly targeting students moving from a satellite campus to the Indiana campus.

DVST 250 - Role of the Peer Educator: Theory, Practice, and Assessment

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Prerequisite: Instructor permission

Prepares selected students for the role of a peer educator within the higher education setting. Topics include student learning and problem solving, facilitative helping and interpersonal communication, peer leadership, and assisting peers with how to effectively and efficiently succeed at the college level. (Roles include supplemental instruction leader, tutor, peer advisor, workshop leader.)

Early Childhood Education

ECED 112 - Childhood Development Birth–Age 5

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Presents the foundations, theoretical, and practical aspects of the development of young children, focusing on various learning theories/theorists and the developmental stages and needs of children from birth through age five. Examines the various stages of child development with a focus on a review of the research, theories, and theoretical program models, and types of early childhood programs; discusses available community resources, professional organizations, and standards of ethical behavior and practice all in an exploration of child development and contemporary educational, cultural, social, and emotional issues for children, ages birth to five and their families.

ECED 117 - Family, Community, and School Relationships in a Diverse Society

Class Hours: 2

Lab/Discussion: 0

Credits: 2

Students develop a strong understanding and deep appreciation of the diversity among families, communities, and school cultures in the United States. Students gain the ability to locate and develop curricular materials and teaching strategies appropriate to this country's diversity.

ECED 200 - Introduction to Early Childhood Education

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Early childhood education/special education major or early childhood education major

Introduces prospective teachers to the historical, sociological, and political aspects of early childhood education. An emphasis is placed on appreciating diversity in the early childhood classroom and on developing keen observation strategies to both heighten understanding of children and evaluate programs that serve them.

ECED 215 - The Developing Child: K-4th Grade

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces the interrelationships among the various aspects of child development in grades K-4, its relevant theories and educational applications.

Through literature review, critique of theories, observation, and large and small group activities, students learn child development principles and how they may be applied in K-4 educational settings to foster successful learning. (Offered as ELED 215 Child Development before 2015-16.)

ECED 221 - Literature for the Young Child and Adolescent

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Early childhood education/special education major

A survey of literature for children from preschool to adolescence. Selection and evaluation criteria for various genres, including visual and literary elements, are the foundation. Emphasis will also be placed on multicultural literature and literature for diverse learners. Stresses motivational approaches for encouraging children's engagement with and response to literature.

ECED 250 - Language Development

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Early childhood education/special education major or early childhood education major

Acquaints students with the process of children's language acquisition and development through expressive skills and language comprehension. Observation, documentation, and assessment of language development across the areas of listening, speaking, writing, drawing, and reading are explored from both a theoretical and practical perspective.

ECED 280 - Maximizing Learning: Engaging All PreK to Grade 4 Learners

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Early childhood education/special education majors or early childhood education majors only

Examines competencies specific to the science of teaching, the organization and management of functional learning environments, and the design, implementation, and evaluation of developmentally appropriate learning experiences. Areas explored include models of teaching, lesson and unit planning, and creating a classroom environment that is conducive to learning.

ECED 310 - Science, Health, and Safety for All PreK to Grade 4 Learners

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Early childhood education/special education major or early childhood education major, admission to Teacher Education Step 1

Examines strategies for teaching science and health concepts; design of lessons that integrate science, health, and safety; and learning how to become role models for children. Students develop knowledge of how to design lessons with appropriate content and methods for young children.

ECED 351 - Literacy for the Emergent Reader: PreK to Grade 1 Learners

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Early childhood education/special education major or early childhood education, admission to Teacher Education Step 1

Provides early childhood teachers with various strategies, techniques, and materials related to developing early literacy in children. Current research

and practical applications are interwoven to ensure a systematic coverage of the most recent methods and best practices. Focuses on the development of speaking, listening, reading, and writing skills for PreK to grade 1 learners.

ECED 411 - Social Studies for All PreK to Grade 4 Learners

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Early childhood education/special education major or early childhood education major, admission to Teacher Education Step 1
An overview of social concepts related to geography, history, economics, civics and government, and citizenship. Prepares teacher candidates to offer classroom instruction to all PreK to grade 4 learners, which builds civic competence and enables students to use skills of collaboration, decision making, and problem solving.

ECED 425 - Methods of Teaching and Assessing Language Arts: Pre-K to Grade 4 Learners 2.5c-0l-2.5cr

Class Hours: 2.5

Lab/Discussion: 0

Credits: 2.5

Prerequisite: ECED 351

Emphasizes the art of communication as an interrelated process. The task of the early childhood teacher is to develop and integrate the language arts throughout the curriculum. Techniques for teaching and assessing developmentally-appropriate oral and written communication, spelling, handwriting, and vocabulary are presented. Special emphasis is given to developmental writing approaches.

ECED 451 - Literacy for the Developing Reader: Grades 2-4 Learners

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Early childhood education/special education major or early childhood education major, admission to Teacher Education Step 1
Provides preservice teachers with theoretical context, as well as various strategies, techniques, and materials related to teaching literacy skills, developing positive dispositions toward literacy, and fostering supportive environments for literacy development. Instructional issues, specifically related to teaching reading to young children, children with disabilities, and English language learners, are investigated. Contemporary research on theoretical perspectives and best practices, as well as practical application, is interwoven to ensure a balanced approach to the most effective instructional practices.

ECED 499 - Advocacy and Collaboration in Diverse Families and Communities

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Provides students with understanding and skills in multicultural approaches to education that enable them to recognize and respect the diversities that all their students bring to school and to also become effective advocates as they collaborate successfully with diverse families and communities.

Economics

ECON 101 - Basic Economics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Scarcity, role of prices in determining production and the allocation of resources, business cycle analysis, policy options for reducing unemployment and inflation, economic role of government, international trade, and selected current economic problems are studied. For those who do not plan to take more than 3cr of economics. Note: May not be taken after successful completion of or concurrent registration in any other Economics course.

ECON 121 - Principles of Macroeconomics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Nature and methodology of economics; mixed capitalism and market economy; national income; employment theory, including economics of fiscal policy; money, banking, and Federal Reserve System; international trade and finance.

ECON 122 - Principles of Microeconomics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Economics of firm; theory of consumer demand; determination of price and output in different market structures; distribution of income; economic growth.

ECON 143 - Financial Wellness

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Theories and principles related to the physical, social, and emotional wellness aspects of individual money management. Information is focused on building a sound financial foundation as a college student and can be applied throughout the life span to ensure future financial well-being. Successful completion fulfills the Liberal Studies Dimensions of Wellness requirement.

ECON 223 - Economics of Crime

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Economic analysis of criminal activity and its impact on the allocation of scarce resources. Uses fundamental economic models to explain crimes against people, property crime, "victimless crime," and organized crime.

ECON 239 - Economics of Sports

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces and develops the economic way of thinking as it applies to the sports industry. Topics covered include the organizational structure of major American sports leagues (e.g., revenue sharing, salary restrictions, and competitive balance), labor issues in sports (e.g., free agency, reserve clause, unions, strikes, and discrimination), the legal relationship between sports and government (e.g., the relationship between antitrust law and sports), and the issue of sports and public finance (e.g., location and financing of sports franchise and public ownership of stadiums and arenas).

ECON 281 - Special Topics

Class Hours: var
Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 281 are offered primarily for lower-level undergraduate students.

ECON 325 - Monetary Economics I

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: ECON 121, ECON 122

Organization, operation, and economic significance of US monetary institutions; commercial banks and Federal Reserve System; survey of monetary theory and policy; mechanism of international payments.

ECON 330 - Labor Economics

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: ECON 121, ECON 122

History, structure, and operation of trade unions and employer organizations; major federal labor legislation; collective bargaining theory; wage determination; current labor problems.

ECON 331 - Industrial Organization

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: ECON 122 or instructor permission

Social effectiveness of industries analyzed through measures of market structure, market conduct, and market performance.

ECON 334 - Managerial Economics

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: ECON 121, ECON 122, MATH 121 or equivalent

Applications of economic theory using algebra, elementary statistics, and calculus to solve managerial optimization problems including problems of forecasting and risk.

ECON 335 - Public Finance

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: ECON 121, ECON 122 or instructor permission

Taxation and expenditure theory at the federal level; federal budget and debt considerations; public sector impact on economy.

ECON 338 - Poverty in Africa

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ECON 101 or ECON 121 or ECON 122

Examines African poverty as an economic as well as a social phenomenon. It investigates the many-sided nature of poverty and the importance of going beyond generalizations about the poor, including the various causes of poverty in Africa. It stresses the powerful ill effects of a combination of sluggish past economic growth, widening income inequalities, and anti-poverty strategies implemented by many African nations.

ECON 339 - Economic Development I

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ECON 121, ECON 122 or instructor permission

Introduces the following concepts: theory of growth; theory of economic development of underdeveloped countries.

ECON 343 - Economic History of the United States

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ECON 101 or ECON 121 or ECON 122

Applications of economic theory and models of economic development to the main patterns of US post-revolutionary growth; emphasizes the history of economic development as a laboratory for testing economic hypotheses.

ECON 345 - International Trade

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ECON 121, ECON 122 or instructor permission

A study of the microeconomic segment of international specialization and exchange, including theories of international trade and their application to commercial policies, historical survey and examination of current problems of international trade, and the institutional setting of international trade.

ECON 346 - International Finance

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ECON 121, ECON 122 or instructor permission

A study of the macroeconomic segment of international specialization and exchange, including analysis of balance of payments, exchange rates, and the mechanism of international economic and monetary adjustments; international macroeconomic policy; historical survey and examination of current international financial problems; and the institutional setting of international payments.

ECON 356 - Introduction to Econometrics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ECON 355 or its equivalent or instructor permission

An introduction to econometrics, including linear normal regression models of two or more random variables, special econometric problems, and solutions of simultaneous equations.

ECON 360 - Health Economics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ECON 122

Analyzes the market for healthcare: demand by individual consumers and supply by health workers and hospitals. Considers the problems of information, risk, and externalities in making health decisions and the role of insurance. Explores public health policies, both in a world and domestic context. Introduces economic methods for program/policy research: elasticity estimation, cost-benefit analysis, and supply-demand modeling.

ECON 361 - Environmental Economics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ECON 101 or ECON 122

An examination of economic costs and benefits of environmental control and modification. Techniques of economic analysis are used to understand economic aspects of environmental problems and contribute toward their solution.

ECON 362 - Global Poverty and Health

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ECON 122

Researches information related to global trends in health and poverty and examines theories related to the economic, social, and political forces behind these trends. Economically analyzes the barriers preventing greater access to and usage of health services in poor communities, such as asymmetric information, monopoly provision, and externalities. Critically examines health service provision from opposite economic spectrums: (1) as Global Public Goods and (2) as micro-programs targeting specific populations. Covers case studies of health initiatives in developing countries and their economic impacts.

ECON 421 - Macroeconomic Analysis

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ECON 121, ECON 122 or instructor permission

Emphasizes aggregate income levels and problems of unemployment, inflation, and growth. Covers consumption and investment theories and the role of fiscal and monetary policy.

ECON 422 - Microeconomic Analysis

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ECON 121, ECON 122, MATH 121 or equivalent

Consumer behavior, theory of the firm, theory of exchange, market structures, distribution, general equilibrium theory, welfare economics.

ECON 456 - Advanced Econometrics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ECON 356 or equivalent or instructor permission

Provides a more thorough understanding of the theory and practice of econometrics introduced in ECON 356. Students increase their proficiency in econometric analysis and improve their research skills by extending their research agendas begun in ECON 356 and through exposure to the scholarly literature. Students learn about a variety of topics related to regression analysis, including violations of the Classical assumptions, extensions of the basic regression model, and advanced techniques.

ECON 480 - Seminar

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Instructor permission

A seminar in selected economic issues or problems.

ECON 481 - Special Topics

Class Hours: var

Credits: 1-3

Prerequisite: Instructor permission

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 481 are primarily for upper-level undergraduate students.

ECON 483 - Honors Thesis

Class Hours: var

Credits: 1-6

Prerequisite: Admission to departmental honors program; prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

An intensive, focused study involving independent research culminating in a written thesis approved by a thesis director and two faculty readers/committee members. May be taken more than once to a maximum of 6cr.

ECON 493 - Internship in Economics

Class Hours: var

Credits: 2-12

Prerequisite: Economics major who has completed at least 12cr in economics and has at least a 2.5 GPA in the major and in all course work

Provides on-the-job experience in economics positions with private and governmental employers. The student is also required to complete related academic work in the form of papers and selected readings. Number of credits earned depends on the nature of the job and amount of time involved in internship. A maximum of 6cr earned in this course may be counted toward the 30cr in economics requirement for economics majors.

Early Childhood/Special Education

ECSP 112 - Growth and Development: Typical and Atypical

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Presents the foundations, theories, and research findings on human growth from conception, including basic embryogenesis, up to early adolescence. Examines various aspects of child development with an emphasis on biological, cultural, educational, and parental influences that shape children, as well as selective examples of typical and atypical cognitive, physical, and social-emotional development.

ECSP 314 - Creative Experiences and Play for All PreK to Grade 4 Learners

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Early childhood education/special education major or early childhood education major

Provides teacher candidates with the knowledge and skills necessary to incorporate creative music, art, drama, movement, and play activities into a comprehensive early childhood inclusive curriculum. How integration of creative experiences and play will enhance and encourage the development of all PreK to grade 4 learners is emphasized, as is the historical, theoretical, and research base for the integration of play and creative experiences into a fully inclusive classroom.

ECSP 340 - Introduction to Classroom and Behavior Management

Class Hours: 3

Lab/Discussion: 01

Credits: 3

Prerequisite: Early childhood education/special education major

An overview of classroom organization and management, along with systematic behavior change techniques required for effective teaching and enhanced student learning for all children in PreK through grade 4 and students identified with special needs or at-risk through grade 8. The research-based classroom management and behavioral techniques can be used to create a positive learning environment for all students in an inclusive setting.

ECSP 440 - Professional Seminar: Teacher as Researcher and Advocate for All PreK to Grade 4 Learners

Class Hours: 2

Lab/Discussion: 0

Credits: 2

Prerequisite: Early childhood education/special education major, successful completion of Teacher Education Step 1, admission to Teacher Education Step 2, concurrent enrollment in EDUC 461, EDUC 471

Provides support in a teacher candidate's ongoing professional development. Emphasizes guidelines for professional etiquette, ethical behavior, professional practice, and effective interpersonal relations with teachers, paraprofessionals, school and agency personnel, parents, and students. Facilitates work in engaging in informed advocacy efforts on behalf of children and the profession and examining the theoretical and research base for classroom practices.

Education of Exceptional Persons

EDEX 103 - Special Education Technology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Addresses the use of assistive technology in the classroom in areas of communication, mobility, education, recreation, vocation, independence, and therapy/rehabilitation. The emphasis is on developing awareness of the diversity of assistive technology currently available for individuals with disabilities. Specific applications of assistive technology devices, which improve and maintain the functioning capabilities of individuals with disabilities, are presented. Students engage in independent learning activities and receive information that enables them to gather information about assistive technology devices, companies, and related services.

EDEX 110 - Introduction to Special Needs PreK to Grade 8

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Early childhood education/special education majors only

Surveys characteristics, needs, problems, and behavior patterns of any child who deviates sufficiently from typical to be considered disabled or at risk for disability. Consideration to children who fall intellectually both above and below average and those who are disabled visually, acoustically, behaviorally, orthopedically, neurologically, or in respect to speech patterns. Focuses on children from birth to adolescence.

EDEX 111 - Introduction to Exceptional Persons

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Department majors, dual majors, ECED majors, minors, and official incoming transfers only

Surveys characteristics, needs, problems, and behavior patterns of individuals who have disabilities or who are gifted. Students develop an understanding and knowledge of individuals with sensory, behavioral, physical, cognitive, language, and learning disabilities. Acquaints students with history and legislative bases of special education.

EDEX 114 - Atypical Development in Infants, Children, and Adolescents

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PSYC 101, EDEX 111

Presents foundations of human growth from conception to age 21. Atypical development related to special needs is emphasized with regard to cognitive, physical, and social-emotional development. A foundation for the understanding of the needs of students with developmental disabilities ranging from early intervention to the end of their high school years.

EDEX 223 - Reading Methods and Strategies for Students with Disabilities

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: EDEX 103, EDEX 111

Focuses on basic concepts of developmental reading instruction and specially designed instruction for students with diverse needs. Reviews research in the field, examines necessary assessment tools, and surveys current issues, trends, practices, and services. Examines issues and practices related to students who are English language learners. Facilitates the acquisition of new skills through a variety of instructional approaches (e.g., cooperative learning, simulations, role-playing).

EDEX 269 - Identifying and Understanding Children with Academic and Social Learning Needs from Preschool through Adolescence

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: EDEX 110 or EDEX 111, early childhood education/special education majors only

Focuses on evidence-based practices for educating children with special needs for academic instruction and/or social and emotional learning. Reviews literature on characteristics of students with learning and behavior problems and summarizes research on academic interventions, classroom climate, social and emotional learning, and self-regulation strategies. Applies social and behavioral learning theories to management of academic and social instruction. A variety of instructional approaches (e.g., case studies, simulations) are used to facilitate acquisition of new knowledge and to apply the knowledge to educational settings.

EDEX 278 - Identifying and Understanding Children with Significant Adaptive Behavior and Learning Needs from Birth through Adolescence

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Early childhood education/special education majors only

Focuses on major theoretical principles and basic knowledge regarding the nature and characteristics of children with significant adaptive behavior and learning needs. Presents practical information and explores the positive potential of children with significant needs. Introduces the legal foundation and federal regulations of IDEA that guide the assessment and instructional planning to include the Individual Family Service Plan (IFSP) and the Individualized Education Program (IEP). Examines information that is critical and generic to instruction in all domains and content areas.

EDEX 301 - Education of Students with Disabilities in Inclusive Secondary Settings

Class Hours: 2
Lab/Discussion: 0
Credits: 2

Prerequisite: Secondary education majors and others who will be certified to teach content from K-12

Examines the issues associated with education of students with diverse learning needs, particularly those with disabilities or who are at risk for school failure. Emphasizes special education, particularly the legal rights of students with exceptionalities and their parents, and the responsibilities of educators in addressing those rights. Examines the differential impact of student characteristics on secondary-level school performance and instructional methods proven to be effective in educating students with disabilities and learning style differences. Recommendation: Strongly recommended that this course be taken in the same semester as the designated methods course.

EDEX 321 - Methods of Teaching Language Arts to Persons with Disabilities

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: EDEX 111

A review of typical and atypical characteristics of learners with disabilities in relationship to the language arts. Examines issues related to the preparation and execution of units of instruction in language arts for persons with mental and/or physical disabilities as well as issues and practices related to students who are English language learners. Stresses the use of diagnostic and prescriptive approaches to the integration of language arts across the curriculum with an emphasis on reading.

EDEX 323 - Instruction of English Language Learners with Special Needs

Class Hours: 2
Lab/Discussion: 0
Credits: 2

Prerequisite: Admission to teacher certification

Provides future teachers with the necessary methods to meet the needs of English language learners with special needs in the classroom. Based on knowledge of the behaviors, beliefs, and attitudes of a multicultural approach to learning, instructional methods, appropriate assessment and language acquisition techniques, and use of varied resources are included.

EDEX 340 - Introduction to Behavior Management in Special Education

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: EDEX 111, 112, PSYC 101

An overview of systematic behavioral change techniques for use with students in a variety of special education settings, including integrated, resource, self-contained, special school, and residential. Emphasizes a case analysis approach to creating and evaluating behavioral changes for students with mild to severe disabilities.

EDEX 369 - Education of Persons with Emotional/Behavioral Disorders, Learning Disabilities, or Brain Injury

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Focuses on major theoretical positions regarding etiology of emotional/ behavioral disorders, learning disabilities and brain injury; definition and identification of the populations; and educational approaches. Reviews research in the field, including current issues, trends, educational practices, and services. Uses a variety of instructional approaches (e.g., cooperative learning, simulations, role-playing) to facilitate acquisition of new knowledge and skills. (Also offered as DISB 369; may not be taken for duplicate credit.)

EDEX 378 - Education of Persons with Intellectual/Developmental Disabilities and Physical/ Multiple Disabilities

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Focuses on major theoretical positions regarding etiology of intellectual disabilities, developmental disabilities, a wide and diverse range of physical/ multiple disabilities, and other health impairments. Discusses definitions, population characteristics, and educational approaches. Reviews research in the field, including current issues, trends, practices, and services. (Also offered as DISB 378; may not be taken for duplicate credit.)

EDEX 415 - Preschool Education for Children with Disabilities

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Information on assessment, intervention strategies, curriculum, and prescriptive planning for preschool children with disabilities. For departmental majors who are specifically interested in early childhood special education, as an elective for other interested students in related fields, and as a required course for disability services majors.

EDEX 424 - Strategic Assessment and Instruction in Expository Texts

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Special Education majors, Early childhood education/special education majors, completion of Step 1 of the 3-Step Process

Focuses on methodologies used for assessing, designing, and implementing instruction in expository texts for students with reading and learning disabilities. Addresses the demands of educational environments in which teachers are expected to collaborate in providing direct services to students. Special consideration is given to the growth and development of collaborative practices. In addition, students are expected to collaborate with each other in planning, designing, adapting, and evaluating assessment and instructional activities for a range of content area expository texts.

EDEX 425 - Methods and Curriculum (Mild-Moderate Disabilities)

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Special Education majors, Early Childhood Education/Special Education majors, completion of Step 1 of the 3-Step Process
An in-depth examination of assessment methods, strategies, and curricula. Emphasizes assessment methods and strategies used in a variety of service models that serve elementary- and secondary-level students with learning disabilities, behavioral disorders, mild mental retardation, and high-function autism.

EDEX 435 - Methods and Curriculum—Severe Cognitive Disabilities

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Special Education majors, Early childhood education/special education majors, completion of Step 1 of the 3-Step Process or permission
Emphasizes methods designed to facilitate the development of an integrated, functional, and community-based curriculum that prepares individuals for integration in a wide variety of postschool environments. Particular attention is given to methods and interventions based on the principles of applied behavior analysis.

EDEX 440 - Ethical and Professional Behavior

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Emphasizes ethical and professional behavior for educational professionals working with individuals with special needs. Focuses on responsible and ethical conduct as it relates to interaction with students and other professionals in direct service, instructional, and/or supervisory roles. Also addresses legal implications related to these roles.

EDEX 458 - Transition Assessment and Planning for Youth with Disabilities

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Develops competencies in the skills necessary to help students with disabilities make a successful transition from school to adult life. Transition service elements are, at a minimum, postsecondary education and training, employment, and community living. For students with disabilities, successful outcomes require self-determination and other personal-social characteristics that must be identified and supported by the transition team throughout the entire transition planning process.

EDEX 460 - Family Perspectives on Disability

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PSYC 101

For any major who will work with families and youth with disabilities. By understanding families as competent and resourceful systems, students critically examine ways to collaborate effectively with family members. Focuses on legal and philosophical bases for supporting families in making important decisions affecting the education and care of their children.

EDEX 469 - Education of Persons with Emotional/Behavioral Disorders, Learning Disabilities or Brain Injury

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Focuses on major theoretical positions regarding etiology of emotional/behavioral disorders, learning disabilities and brain injury; definition and identification of the populations; and educational approaches. Reviews research in the field, including current issues, trends, educational practices, and services. Uses a variety of instructional approaches (e.g., cooperative learning, simulations, role-playing) to facilitate acquisition of new knowledge and skills. Students are expected to develop presentations using internet resources and electronic format.

EDEX 478 - Education of Persons with Mental Retardation/Developmental Disabilities and Physical/Multiple Disabilities

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Successful completion of Step 1 of the 3-Step Process and a dual major in disability services/sociology or a minor in special education. Focuses on major theoretical positions regarding etiology of mental retardation, developmental disabilities, a wide and diverse range of physical/multiple disabilities, and other health impairments. Discusses definitions, population characteristics, and educational approaches. Reviews research in the field, including current issues, trends, practices, and services.

Education of Deaf and Hard-of-Hearing Persons

EDHL 114 - Introduction to Deaf and Hard-of-Hearing Persons

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Deals with the different approaches used in teaching students who are deaf or hard of hearing—manual language, oral language, and total communication. The historical background of each approach is presented with its strengths and weaknesses. Criteria for the use of each approach are established in consideration of degree of loss exhibited by the pupil, the age of onset, and the social and psychological implications.

EDHL 115 - Introduction to American Sign Language

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Deaf education or disability services major or Deaf studies minor or permission. Development of manual dexterity and fluency using fingerspelling. Acquisition of basic American Sign Language syntax, semantics, vocabulary, and pragmatics. Practice in acquiring general information from a signed message and conversing informally on commonly used topics. Exploration of the history of ASL and cultural aspects within the deaf community.

EDHL 215 - Intermediate American Sign Language

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: EDHL 115, 3.0 GPA required for deaf education majors, 2.8 GPA for Deaf studies minors
Emphasizes vocabulary expansion, comprehension of signed information, and development of fluency in conveying a message in American Sign Language. Focuses on idiom-like expressions, number systems, rules, grammar, and conversational language. Total immersion approach is used.

EDHL 308 - Supporting Language and Communication for Deaf/Hard-of-Hearing, English Language Learners, and Individuals with Language Disorders

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: EDHL 114, admission to Step 1 of the 3-Step Process
Reviews normal language development for birth through 12 years and compares it to the language development of children with various types and degrees of hearing loss. Emphasizes specific strategies focused on the assessment and development of English language skills in English language learners (ELL) and deaf and hard-of-hearing children (D/HH).

EDHL 317 - Sign Language in Educational Settings

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: EDHL 215, deaf education major or permission
Focuses on the use of sign language in the schools. Includes the adaptation of American Sign Language to Manually Coded English and Signed English, basic principles of interpreting in an educational setting for future teachers of deaf and hard-of-hearing students, and pedagogical methods of including American Sign Language as a language of instruction for deaf students.

EDHL 417 - Advanced American Sign Language

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: EDHL 215
A continuation of Intermediate American Sign Language (ASL). Focuses on vocabulary expansion, comprehension of signed information, and development of fluency in conveying a message in ASL. Emphasizes receptive ability as well as overall quality of expression. Additional cultural aspects of ASL are discussed.

Educational and School Psychology

EDSP 102 - Educational Psychology

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Promotes an understanding of the principles of psychology governing human behavior, with particular emphasis on the relation to the learner, learning process, and learning situation in an educational environment.

EDSP 157 - Introduction to Professions in Education

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Introduces high school students to the field of education, as well as the various professions within the field. Acquaints students with the history of education and discusses current issues and trends including societal, political, and cultural influences on the field of education. Familiarizes students with the process of earning a degree in educator preparation at IUP, as well as achieving certification from the Pennsylvania Department of Education (PDE).

EDSP 257 - Understanding and Taking Standardized Tests

Class Hours: 1
Lab/Discussion: 0
Credits: 1

For teacher education majors to promote their understanding of the principles of successfully mastering standardized tests such as the Praxis I exam. A particular emphasis on practicing the skills necessary for understanding the assessments. Highlights the application of skill-based decision making in preparing for test taking. Also discusses implications of individual differences and variables that affect performance on standardized tests.

EDSP 373 - Psychology of Adolescent Education

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: EDSP 102

A study of significant characteristics, behavior, and educational and social problems of adolescents.

EDSP 378 - Learning

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: EDSP 102

Explores learning theories and educational application in the classroom.

EDSP 468 - Current Topics in Educational Psychology

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: EDSP 102

Enables students to participate in advanced study of current topics at the interface between issues in education and the theories that drive the field. Investigates topics as they apply to specific aspects of teaching and learning. Investigates current academic considerations with a variety of perspectives being integrated to prepare students for addressing the needs of students.

EDSP 476 - Foundations of Behavior Analysis

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: EDSP 102 or instructor permission

Introduces behavior analysis through discussion of its philosophical assumptions, theoretical underpinnings, and basic concepts. (Offered as EDSP 376 before 2017-18.)

EDSP 477 - Assessment of Student Learning: Design and Interpretation of Educational Measures

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PSYC 101 or EDSP 102 or permission; admission to teacher certification

Describes major methods and techniques of evaluation used to assess and report the growth, development, and academic achievement of learners in preschool, elementary, and secondary schools, including interpretation of standardized test information.

EDSP 479 - Interpreting and Critiquing Educational Research

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: EDSP 477 or instructor permission

Obtain knowledge and understanding of various designs, components, and principles used in educational research articles and develop application, analysis, synthesis, and evaluation skills which will allow the summarizing and critiquing of a variety of research articles.

EDSP 493 - Educational Psychology Honors Internship

Credits: 1

Prerequisite: EDSP 102 and admission to Honors Track

A direct experience in one of three centers located in the Educational and School Psychology Department; centers include the Child Study Center and the Center for Rural Gifted Education. Other centers located within the College of Education and Communications or the Teacher Education Program may be considered if approved by the Honors Track director. May be repeated.

Education

EDUC 221 - Seminar in Essential Skills in Peer Mentoring

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Focuses on the critical peer mentoring skills including leadership, professionalism, and interpersonal communication. Instructs students in comprehensive preparation for working one-on-one with mentees, while maintaining confidentiality and respecting appropriate boundaries in the relationship. Demonstrates mentoring skills and proper accountability in supervised field experiences.

EDUC 242 - Pre-student Teaching Clinical Experience I

Credits: var-1

Prerequisite: Admission to teacher certification

Introduces specific competencies that relate to individual major fields of teaching and university-based instruction, as well as observation/participation in a PreK-grade 12 field experience. These competencies incorporate strategies and techniques for addressing the needs of all students, including those with special and English language learning needs.

EDUC 250 - Labyrinth Seminar

Class Hours: 1
Lab/Discussion: 0
Credits: 1

Focuses on the communication, executive functioning, and inter/intrapersonal demands of college life. Designed to build the necessary skills to navigate the social and academic environment to succeed in the college experience. The seminar includes both teacher- and student-directed topics. This course can be repeated every semester that the student elects to participate in the Labyrinth Center.

EDUC 281 - Special Topics

Class Hours: var
Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 281 are offered primarily for lower-level undergraduate students.

EDUC 342 - Pre-student Teaching Clinical Experience II

Credits: 1

Prerequisite: EDUC 242, admission to junior standing

Continues to develop and refine competencies that relate to individual major fields of teaching through university-based instruction as well as participation and teaching in a PreK-grade 12 school field experience. Also incorporates strategies and techniques for the delivery of instruction to all students, including those with special and English language learning needs. May be repeated for students seeking dual certification.

EDUC 421 - Student Teaching

Class Hours: var
Credits: 5-6

Prerequisite: Admission to student teaching

An experience in teaching at the elementary level; coordination and visitation by a university faculty member with daily supervision by a cooperating classroom teacher.

EDUC 440 - Professional Seminar: Teacher as Leader and Researcher Grades 4-8

Class Hours: 2
Lab/Discussion: 0
Credits: 2

Prerequisite: Middle-level education 4-8 major, concurrent enrollment in student teaching EDUC 421 and EDUC 441

Provides support in a teacher candidate's ongoing professional development. Emphasizes guidelines for professional etiquette, ethical behavior, professional practice, and effective interpersonal relations with teachers, paraprofessionals, school and agency personnel, parents, and students in grades 4-8. Examines the theoretical and research basis for classroom practices.

EDUC 441 - Student Teaching

Class Hours: var
Credits: 5-12

Prerequisite: Admission to student teaching, successful completion of Step 2 of Teacher Education 3-Step Process

An experience in teaching at the elementary or secondary level; coordination and visitation by a university faculty member with daily supervision by a cooperating classroom teacher.

EDUC 442 - School Law

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Required of all teacher certification students. Includes an overview of legal principles that apply to special areas of education. Must be taken before student teaching.

EDUC 451 - Teaching Science in the Secondary School

Class Hours: 2

Lab/Discussion: 2

Credits: 3

Prerequisite: Admission to student teaching

Provides the background to help science majors meet the problems of teaching science. Various inquiry approaches useful in meeting the objectives of a contemporary science class, including special needs students and English-language learners, are taught and exemplified.

EDUC 452 - Teaching of English and Communication in the Secondary School

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 314, ENGL 323, ENGL 324 (or approved equivalents) and admission to Step 1 of the 3-Step Process

A Prerequisite to student teaching in English. Introduces current professional practices in the teaching of English and communications in secondary school.

EDUC 453 - Teaching of Foreign Languages in the Secondary School

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grade of "C" or better in SPAN 390 or FRNC 390 /GRMN 390; instructor permission

Helps students develop an understanding of current theories of foreign language learning through exploration of relevant research. Students read about and discuss the implications of key research for teaching in secondary school classrooms. Opportunities are provided to use the theoretical base to design and present classroom lessons and to reflect on the effectiveness of their teaching. Special attention is given to designing performance-based language assessments and to adapting instruction to address the special needs of learners. Taught fall semester only.

EDUC 455 - Teaching of Social Studies in Secondary Schools

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Admission to Teacher Education Program

A study of modern methods and techniques for teaching social studies and of current curricula in social studies.

EDUC 456 - Teaching Mathematics in the Secondary Schools

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Admission to Teacher Education Program, a declared major in mathematics education, and EDUC 242 with a grade of "C" or better
A study of curricula, standards, methods, and techniques for teaching mathematics in the secondary schools.

EDUC 461 - Student Teaching

Class Hours: 6
Lab/Discussion: 0
Credits: 6

Prerequisite: Admission to student teaching, successful completion of Teacher Education Step 2
An experience in teaching students with special needs at the PreK to grade 8 level; coordination and visitation by a university faculty member with daily supervision by a cooperating teacher.

EDUC 471 - Student Teaching

Class Hours: 6
Lab/Discussion: 0
Credits: 6

Prerequisite: Admission to student teaching, successful completion of Teacher Education Step 2
An experience in teaching students with special needs at the PreK to grade 8 level; coordination and visitation by a university faculty member with daily supervision by a cooperating teacher.

EDUC 481 - Special Topics

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: By permission only
An opportunity to investigate in depth an area of education under professional supervision.

EDUC 482 - Independent Study

Class Hours: var
Credits: 1-3

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Provost's Office
Students with interest in independent study of a topic not offered in the curriculum may propose a plan of study in conjunction with a faculty member. Approval is based on academic appropriateness and availability of resources.

EDUC 499 - Multicultural/Multiethnic Education

Class Hours: 2
Lab/Discussion: 0
Credits: 2

Prerequisite: One methods course must be taken before, or concurrently with, EDUC 499
Provides an understanding and appreciation of cultural diversity in the United States. Students gain the ability to locate and develop curricular materials appropriate to this country's diversity.

Education, Training, and Instructional Technology

ETIT 330 - Technology in the Classroom

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Examines approaches for the evaluation and use of various classroom technologies. Explores the development of technology design and how these developments influence the current status of student performance in education. Highlights research that allows them to systematically and creatively apply the concepts and rules learned in the research and practiced in classrooms.

Effective Teamwork and Communication Studies

TMWK 461 - Teamwork and Communication Capstone

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Prerequisite: Any independent study, undergraduate research, or honors thesis

Capstone course for those minoring in effective teamwork and communication. Reflective nature of the course builds on core foundational material and in-major teamwork experiences. Emphasizes development of students' philosophies of teamwork and communication through reflection and practice. Coupling of in-major independent study, undergraduate research, or honors thesis, by means of an interdisciplinary, semester-long project enhances real-world team experiences valued by future employers and graduate programs. Promotes the importance of showcasing team and communication skills to future employers through resume, cover letter, and portfolio. (may be taken concurrently)

Employment and Labor Relations

ELR 314 - Health Policy and Law

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Focuses on understanding the evolution of healthcare policy, health law, and federal and state regulation of healthcare financing programs. Introduces healthcare policy making; critical health policy issues; legislative, regulatory, and legal challenges; and legislative and political processes that impact the healthcare delivery system in the United States. (Cross-listed as NURS 314.)

ELR 480 - Introduction to Negotiations and Conflict Resolution

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Deals with negotiations and conflict resolution techniques. An introduction to current concepts and theories of negotiations and resolving conflict and their application generally to everyday issues. Prepares students to engage in these techniques in workplace issues such as collective bargaining, negotiating contracts and agreements internally as well as externally.

English

ENGL 100 - Basic Writing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

The student develops the basic English skills necessary for clear and effective communication. Restricted to freshmen whose placement testing essay or portfolio score is a four or under. Does not meet General Education English or Liberal Studies writing requirements.

ENGL 101 - Composition I

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 100 where required by placement testing

In this first-year writing course, students compose projects in multiple written genres that address specific rhetorical situations. Uses memory, observation, critical reading and viewing, analysis, and reflection to draft, peer review, revise, and edit projects.

ENGL 121 - Humanities Literature

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 101

An exploration of literature and the methods of close reading. Through encounters with significant literary texts, students investigate and analyze how literary meaning is constructed; how literature shapes and is shaped by its various contexts; and how literature enables critical inquiry into values. Includes literary texts by women and people from underrepresented communities. Also offered as FNLG 121. ENGL 121/FNLG 121 may be used interchangeably for D/F repeats; may not be counted for duplicate credit.

ENGL 122 - Introduction to English Studies

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: English major/minor; minimum grade of "C" in ENGL 101

Introduces students to English studies by acquainting them with the critical approaches appropriate to the varied subject areas of the discipline. The assumptions and methods of these approaches are considered, especially in the interpretation of literature. At the conclusion, students are able to critically analyze texts and demonstrate those skills in discussion and writing. Required of all English majors.

ENGL 202 - Composition II

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 101 and sophomore standing

Serves as a bridge between Composition I and students' professional writing. Develops rhetorical skills for informed inquiry. Also develops the following abilities: writing, critical reading, revising, citing and documenting, speaking and listening, and reflecting.

ENGL 203 - Introduction to Language Studies

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 101

Introduces the study of linguistics and rhetoric. Considers cultural contexts and issues of power, focusing on questions such as how our brains use language, how language represents the world we live in, and how language influences our actions.

ENGL 208 - Introduction to Film Studies

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Concentrates on the film as an artistic medium. Eight to 12 motion pictures are shown during semester and are analyzed in class discussions.

ENGL 210 - British Literature to 1660

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 101, and ENGL 121 or ENGL 122

Surveys British literature from its beginnings to about 1660, acquainting students with the experience of reading many of the primary materials (whole works whenever possible or full, free-standing parts) and provides background information concerning the development and flowering of the various genres, the dominant ideas of each period, and the social and cultural context of the separate works.

ENGL 211 - British Literature to 1660-1900

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 101, and ENGL 121 or ENGL 122

Surveys British literature from about 1660 to the beginning of the 20th century, acquainting students with the experience of reading many of the primary materials (whole works whenever possible or full, freestanding parts) and providing them with background information concerning the development and flowering of the various genres, the dominant ideas of each period, and the social and cultural context of the separate works.

ENGL 212 - American Literature: Beginnings to 1900

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 101, and ENGL 121 or ENGL 122

Provides an understanding of American literature from its beginning to about 1900. Concentrates primarily on a relatively small number of major works, each of which helps to illustrate the "spirit of the age" it represents.

ENGL 213 - British and American Literature Since 1900

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 101, and ENGL 121 or ENGL 122

A survey of major authors and works in British and American literature since 1900. Begins with the shift from Victorianism and late 19th-century literature into modernism, as exemplified by writers such as Woolf, Hemingway, and O'Neill, and continues with postmodernism and contemporary literature.

ENGL 220 - Advanced Composition

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: ENGL 202

Primarily seeks to improve writing style, particularly in the more utilitarian forms, such as magazine article and personal essay.

ENGL 221 - Creative Writing

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: ENGL 121 or ENGL 122 or FNLG 121

A seminar course in which students are expected to produce a substantial body of written work in one or more of the creative genres, the particular kind of writing chosen with regard to the special interests and abilities of each student.

ENGL 222 - Technical Writing

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: ENGL 101

Focuses on helping the student to acquire and to apply communication skills essential to the technical and professional writer.

ENGL 225 - Introduction to Literature by Women

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: ENGL 121 or ENGL 122 and ENGL 202

Major trends and motifs across genres (fiction, nonfiction, poetry, autobiography) that reflect themes and subjects of continuing interest to women writers. The intersection of genre with race, ethnicity, and social class is of particular significance.

ENGL 226 - Survey of Global Literature Since 1900

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: ENGL 101, and ENGL 121 or ENGL 122

Surveys 20th century and contemporary global literature in English and/or translation. Readings are organized around major contexts and themes of colonialism, revolution, decolonization, nationalism, and globalization.

ENGL 227 - Introduction to Legal Writing

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: ENGL 202

Introduces legal research and writing. Students learn to prepare research memos, memoranda of law, legal briefs, court observation essays, and other legal documents. Other topics include legal terminology, audience analysis, and case study analysis.

ENGL 265 - Law and Literature

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Minimum grade of "C" in ENGL 101 and ENGL 202

Explores the historical and cultural connections between selected legal texts and themes as they relate to novels, poems, films, drama, essays, and other literary genres.

ENGL 281 - Special Topics

Class Hours: var

Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 281 are offered primarily for lower-level undergraduate students.

ENGL 308 - Critical Theory

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Minimum grade of "C" in ENGL 122

Explores the major writings, writers, issues, technical vocabulary, and critical methods in literary, textual, and cultural studies theory; acquaints students with how such theoretical methods affect the way literary and cultural texts are read, studied, and taught; and enables the students to recognize and engage in theoretical praxis of various kinds.

ENGL 310 - Public Speaking

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 101

Fundamental principles of public speaking, audience analysis, interest, and attention and selection and organization of speech material.

ENGL 313 - Rhetorical Trends and Traditions

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 101

A survey of the major issues in and uses of rhetorical theory and criticism in contemporary culture, using rhetorical concepts from ancient through contemporary times. Rhetoric is the humanistic study of the ways people manipulate language and try to persuade others in the social world.

ENGL 314 - Speech and Communication in the Secondary English Classroom

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 122, ENGL 202

Offers practical and theoretical approaches to relationships between oral and written communication. Performance based (involving a variety of communication activities) and knowledge based (involving study of research on language arts relationships). Emphasizes integration of the four language arts for improving teachers' own communication skills as well as those of their students.

ENGL 321 - Persuasive Speech and Writing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 202

Focuses on the practice of persuasive discourse in speech, writing, and visual media. Includes projects and readings in debate, written argument, and rehearsed and extemporaneous speaking. Students investigate such subjects as rhetorical foundations and applications, language choice and stylistic variations, popular culture, literature, and communication dynamics.

ENGL 323 - Teaching Literature and Reading in the Secondary School

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 122, ENGL 202

Introduces the theory and research on teaching literature and reading in the secondary school. Reviews reader-response literary theory and classroom-based research on teaching literature. Also reviews socio-psycholinguistic reading theory and classroom-based research on teaching reading.

ENGL 324 - Teaching and Evaluating Writing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 122, ENGL 202, English education major or permission

A study of modern approaches to the teaching of writing, including current theories on the composing process, as well as instruction in evaluating, including holistic scoring. Includes practice in writing.

ENGL 325 - Writing Poetry

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 221 or instructor permission

A writing workshop for students who wish to focus intensively on the writing and revision of poetry and on developing an audience for one's creative work.

ENGL 326 - Writing Fiction

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 221 or instructor permission

A writing workshop for students who wish to focus intensively on the writing and revision of fiction and on developing an audience for one's creative work.

ENGL 327 - Writing Creative Nonfiction

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 221 or instructor permission

A writing workshop for students who wish to focus intensively on the writing and revision of literary nonfiction forms and on developing an audience for one's creative work.

ENGL 328 - Introduction to Linguistics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

An introduction to the study of languages as complex sets of interacting systems needed for human communication in a variety of interpersonal, academic, and professional contexts. Focuses on the fundamentals of sound systems, word structures, sentence structures, text structures, meaning systems, and language-related power systems. Also considers questions of how language develops over time, how languages are made up of a number of varieties, how languages are learned and used, how language use varies for different groups of users, and how these issues are related to cultural contexts including issues of power.

ENGL 329 - The History of the English Language

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Prerequisite: ENGL 202

Studies historical development of the English language as a basis for a better understanding of modern American English.

ENGL 332 - Film Genres

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 101, ENGL 208

Offers a close examination of classic and contemporary films and film theory from a variety of critical perspectives—for example, spectatorship, auteurism, feminism, historiography, and cultural studies—through a focus on genre.

ENGL 335 - Literary Nonfiction

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 202

Focuses on the study of forms of literary nonfiction, in English, which may include traditional essays, lyric essays, memoir, and/or creative nonfiction depending on the instructor's expertise.

ENGL 336 - Language, Gender, and Society

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 202, junior standing

Investigates the various ways that language and gender interact and intersect in society. Examines such questions as: Does society use language to favor one sex over the other? Why is language a crucial component in formulating constructs of masculinity and femininity? What stereotypes of gender-based language are promoted in our society? How can we analyze language to reveal disparate views and treatment of the sexes?

ENGL 337 - Myth

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 202, and ENGL 121 or ENGL 122

Examines the nature and function of the mythic experience and explores the archetypal patterns of myths from various cultures.

ENGL 341 - Poetry

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 101, and ENGL 121 or ENGL 122

Studies the forms and theories of poetry as a genre. Includes study of major writers, movements, and aesthetic developments.

ENGL 342 - Short Fiction

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 101, and ENGL 121 or ENGL 122

Studies the form and theory of short fiction as a genre. Emphasizes major writers and movements as well as significant historical developments.

ENGL 343 - Drama

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 101, and ENGL 121 or ENGL 122

Focuses on the forms and theories of drama as a genre. Emphasizes major writers and movements as well as significant historical developments.

ENGL 344 - Ethnic American Literature

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 101, and ENGL 121 or ENGL 122

Concerned with ethnic US experiences as expressed in poetry, fiction, drama, and autobiography. The topic will vary and be announced in advance. Examples include Asian American, Hispanic, Irish American, Jewish American, and Native American literatures.

ENGL 347 - Playwriting

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: THTR 111 or instructor permission

A practical exploration of the craft and process of playwriting. Focuses primarily on the practical, "hands-on" experiences approximating the "developmental process" currently in use in the American theater. The student is guided from the initial concept through synopsis, outlines, working drafts, and completion of an original one-act play and a "staged reading" of this project. Either of these courses may be substituted for each other and may be used interchangeably for D/F repeats but may not be counted for duplicate credit. Note: Cross-listed as THTR 347.

ENGL 348 - African American Literature

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: ENGL 121 or ENGL 122 and ENGL 202

Primarily 19th- and 20th-century African American literature (poetry, fiction, nonfiction), including works by Frederick Douglass, W. E. B. Du Bois, spirituals and folk poetry, Harriet B. Wilson, Jean Toomer, Richard Wright, Audre Lorde, and Toni Morrison. Emphasizes historical context and an Afrocentric approach.

ENGL 350 - Gender and Sexual Orientation in Literature, Theory, and Film

Class Hours: 3
Lab/Discussion: 01
Credits: 3

Prerequisite: ENGL 202

Introduces literature, film, and theory that focus primarily on lesbian, gay, bisexual, and transgender perspectives. Inquiries into the representation of gender and sexuality within historical and cultural contexts.

ENGL 360 - Editing and Publishing

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: ENGL 202 and ENGL 220 or ENGL 221

A project-based career preparation course focused on creating, editing, and publishing in print and/or electronic forms. Includes theory and practice of editing, practice with publication tools, and group collaboration.

ENGL 361 - Environmental Literature

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: ENGL 121 or ENGL 122, ENGL 202

Focuses on literature devoted to natural and constructed environments, exploring connections among such topics as nature writing, environmentalism, ecocriticism, place studies, bioregionalism, and environmental justice.

ENGL 398 - Global Genres

Class Hours: 3
Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 202

Focuses on a specific literary genre (including, but not limited to, poetry, drama, film, the short story, or the novel) as it has been developed and transformed in global contexts beyond the typical domains of the British or American literary traditions. Situates the use of a genre within transnational literary and historical developments. The global genre studied in a particular semester to be announced in advance.

ENGL 415 - English Language Studies for Teachers

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 202

Focuses on the fundamentals of language study with equal emphasis on the sound, the word, the sentence, the meaning, and the discourse patterns of English as they manifest in daily lives. Educationally relevant topics, such as applications of sociolinguistics to the teaching of English language and literature, varieties of grammar, and linguistic descriptions of styles and registers are an integral part of the course.

ENGL 418 - Young Adult Literature

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 101, ENGL 122, ENGL 323, or permission, English education major

Introduces literature for and about young adults. Emphasizes critical study of the literature and its classification as well as resources and rationales for using young adult literature in the middle and secondary classroom. Explores selection of literature and various methods of literature instruction. (Offered as ENGL 318 before 2014-15.)

ENGL 420 - Writers' Studio

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 220 or ENGL 221

An upper-division course emphasizing reading, discussion, and writing on specialized topics related to the study and performance of writing. The focus varies from semester to semester according to the expertise of the faculty member teaching the course.

ENGL 421 - Digital Writing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 202

Introduces composition and presentation issues in writing for digital media. Focuses on the conventions of digital writing and provides practice in conceiving, composing, and producing networked texts and may include creative expression, persuasion, and collaboration. Extends traditional literacy skills into emergent, digital genres.

ENGL 424 - Second Language Acquisition

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Focuses on how people learn and develop a second language. Explores research in second language acquisition (SLA) and focuses on the multi-disciplinary nature of second language learning and use. Concentrates on the history of SLA and how understanding SLA can affect teaching and learning.

ENGL 426 - ESL Methods and Materials

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Senior standing or instructor permission

An introduction to English as a second language theory and practice. Aims: (1) general understanding of current theory and methods of teaching ESL; (2) ability to select appropriate, and adapt existing, materials for elementary and high school ESL students.

ENGL 434 - Shakespeare

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 122, ENGL 202, and one of ENGL 210-ENGL 213 or ENGL 226

Studies Shakespeare's development as a poetic dramatist against background of Elizabethan stage; examines audience, textual problems, language imagery, and philosophy.

ENGL 436 - Major American Authors

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 122, ENGL 202; and one of ENGL 210-ENGL 213 or ENGL 226

Studies in the literary output of a major American author or authors against the background of the social and literary milieus in which the works were created. Specific subject or subjects to be announced by the instructor.

ENGL 440 - Major Figures in Film

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 121 or ENGL 122; and ENGL 202, ENGL 208

Studies major artists and their contributions to the development of film as an art form from its beginnings to the present. Close analyses of directors, cinematographers, editors, screenwriters, or actors—as individuals or as representatives of a movement in film. Topics vary from semester to semester; thus, one semester may concentrate on a specific director such as Alfred Hitchcock; another semester might study women (as directors, actresses, and editors); and yet another semester might study a collective movement such as film noir.

ENGL 442 - Cross-Cultural Communication

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Explores major trends, issues, research, and exploration in cross-cultural communication. Introduces conceptual frameworks for understanding cross-cultural communication in and out of the classroom.

ENGL 450 - Film Theory

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 121 or ENGL 122; and ENGL 202, ENGL 208

An introduction to major film theories, studied in relation to representative films. Details the complex relationship between film production and film theory, i.e., how theorists have attempted to explain what appears on the screen, its impact, and its relation to "reality," and how filmmakers have responded to the works of theorists (with the two sometimes being the same). Goes far deeper into understanding film than ENGL 208, which focuses mainly on how film is constructed through aesthetic and institutional processes.

ENGL 460 - Topics in Film

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 101, ENGL 208

Selected films dealing with a specific, advanced topic are viewed and assessed to explore the different roles that film plays. Topic to be announced in advance.

ENGL 463 - Topics in Global Literature and Film

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 202

Examines major works in English of a particular topic in global literature and/or film by focusing on the transnational contexts of history and culture surrounding the production and/or reception of literature and film. Topic of global literature and/or film to be announced in advance.

ENGL 481 - Special Topics

Class Hours: var

Credits: 1-3

Prerequisite: As appropriate to course content

Topics vary from semester to semester covering such diverse topics as autobiography, science fiction, folklore, the political novel, black theater, etc.

ENGL 482 - Independent Study

Class Hours: var

Credits: 1-6

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

Students with interest in independent study of a topic not offered in the curriculum may propose a plan of study in conjunction with a faculty member. Approval is based on academic appropriateness and availability of resources.

ENGL 483 - Honors Thesis

Class Hours: var

Credits: 1-6

Prerequisite: Admission to departmental honors program; prior approval through advisor, faculty member, department chairperson, dean, and Office

of the Provost

An intensive, focused study involving independent research culminating in a written thesis approved by a thesis director and two faculty readers/committee members. May be taken more than once to a maximum of 6cr. May be taken more than once to a maximum of 6cr.

ENGL 484 - Topics in English Studies

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Declared English major; ENGL 122, ENGL 202; minimum 24cr in major

Explores themes that may vary according to the faculty member teaching the course. Gives upper-level English majors an opportunity to share their expertise in their track: Literary/Textual/Cultural, Writing, Film, or Language Studies. Students are part of a community of learners and reflect on the ways disciplinary knowledge is constructed in English studies and will construct a portfolio of their work as an English major, both in and out of this class, to assess their growth and potential as readers, writers, and critical thinkers.

ENGL 493 - Internship

Class Hours: var

Credits: 3-12

On-the-job training opportunities in related areas. Application and acceptance to internship program required.

Environmental Engineering

ENVE 101 - Introduction to Environmental Engineering

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces the principles of environmental engineering with specific focus on water pollution and control, hazardous substances and risk assessment, water and wastewater treatment systems, air-pollution and emission control, solid wastes, and global warming.

ENVE 201 - Fluid Mechanics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENVE 101, MATH 125, PHYS 131

Applies basic laws of fluid mechanics with applications to engineering problems, hydrostatic pressure, buoyancy, open systems and control volume analysis, mass conservation and momentum conservation for moving fluids, viscous fluid flows, flow through pipes, and dimensional analysis.

ENVE 211 - Statics and Solid Mechanics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENVE 101, MATH 125, PHYS 131

Examines principles of mechanics, force systems, equilibrium structures, distributed forces, centroids, stress and strain, torsion, bending of beams, shearing stress in beams, combined stresses, principal stresses, deflections of beams, and statically indeterminate members and columns.

ENVE 301 - Environmental Aquatic Chemistry

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: ENVE 101, CHEM 112 or CHEM 114

Examines fundamental principles of general, analytical, physical, and equilibrium chemistry applicable to water and wastewater treatment systems. Topics include thermodynamics and kinetics of acids and base reactions, carbonate chemistry (alkalinity), air-water exchange, precipitation and dissolution, oxidation-reduction, and chemical analysis of water and wastewater in a laboratory.

ENVE 311 - Water Resources Engineering

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: ENVE 201

Explores hydrologic engineering, including fundamentals of hydrology, rainfall-runoff modeling, hydraulic processes (including both pressurized pipe flow and open channel flow), and hydrologic frequency analysis. These fundamentals are then applied in the computation of design flows and in the analysis and design of hydraulic systems such as pipe networks and storm water management systems.

ENVE 461 - Water and Wastewater Treatment

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: BIOL 202, ENVE 301

An overview of engineering approaches to protecting water quality with an emphasis on fundamental principles. Explores design of systems for treating municipal wastewater and drinking water as well as physical, chemical, and biological processes, including sedimentation, filtration, biological treatment, disinfection, and sludge processing.

ENVE 471 - Solid and Hazardous Waste Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: BIOL 202, ENVE 311

Examines the principles of integrated solid waste management. An overview of municipal solid waste (MSW), industrial waste and hazardous waste management, including design and economic analysis. Explores the planning and engineering principles needed to address the growing and increasingly intricate problem of controlling and processing the refuse (solid waste) created by urban societies. Discusses options such as landfilling, composting and incineration from engineering, social, and regulatory perspectives. Reviews physical, chemical, and biological treatment of hazardous waste. Covers federal regulations, permitting and public participation processes and innovative management practices associated with solid and hazardous waste.

ENVE 498 - Environmental Engineering

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Senior standing (90 or more credits) or instructor permission

Capstone design experience involving an interdisciplinary environmental engineering project incorporating real-world clients. Includes visits and

tours of field sites as well as interaction with professional engineers. Focuses on water treatment alternatives, regulatory operational needs, sustainability; and implementation of a realistic schedule and project budget.

Family and Consumer Sciences Education

FCSE 101 - Personal and Family Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Personal and family management as a system and its relationship to the global environment, individuals, and families. Formulation of goals, values, and standards; use of decision-making process; sustainability and utilization of resources.

FCSE 143 - Financial Wellness

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Theories and principles related to the physical, social, and emotional wellness aspects of individual money management. Information is focused on building a sound financial foundation as a college student and can be applied throughout the life span to ensure future financial well-being. Successful completion fulfills the Liberal Studies Dimensions of Wellness requirement. Other 143 courses will also fulfill this requirement, and any of these courses may be substituted for each other and may be used interchangeably for D/F repeats but may not be counted for duplicate credit. This course is cross-listed with ECON 143/FIN 143.

FCSE 315 - Consumer Economics and Family Finance

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Explores the decision-making process of families concerning the utilization of financial, personal, environmental, and social resources. Course content focuses on how families develop, exchange, and allocate resources throughout the lifespan. Discusses basic consumer education including an overview of financial products (e.g., insurance, credit cards), as well as laws and policies related to financial management discussed.

FCSE 350 - Teaching Family Life Education

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Family and consumer sciences education, child development and family relations, and disability services majors, or instructor permission

Emphasizes teaching family life education in family and consumer sciences classrooms and through community organizations and agencies. Lessons are planned and implemented using a variety of instructional methods incorporating adaptations and modifications for special needs learners, basic skills, global concerns, and use of a problem-solving/decision-making approach. Planning of content, learning activities, instructional materials, and evaluation based on clearly stated objectives is emphasized. A microcomputer spreadsheet is utilized to manage a department budget and a grade book. Participation in professional organization activities is expected.

FCSE 450 - Teaching Vocational and Family Consumer Science Education

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: FCSE 350

Emphasizes teaching vocational family and consumer sciences in consumer/ homemaking and occupational family and consumer sciences programs. Federal legislation affecting family and consumer sciences is analyzed for use in program decisions. Emphasizes program development using CBVE model, development of individual learning packets, vocational youth organizations, advisory committees, family and consumer sciences and vocational educational priorities, professional organizations, proposal development for funding, impact on public policy, marketing family and consumer sciences, and development of a personal philosophy of family and consumer sciences education.

Foundations of Education

FDED 440 - Orientation to Teaching in Urban Centers

Class Hours: 2

Lab/Discussion: 0

Credits: 2

Provides an understanding of urban learners and their unique learning needs and conditions. Emphasizes understanding the origin of attitudes and values and how these affect the relationships that exist between students and teachers. Special attention given to practical application of theoretical information to problems of urban education.

FDED 441 - Field Experiences in Urban Education

Class Hours: 3

Lab/Discussion: 0

Credits: 3

A specialized experience for students who are considering teaching in inner-city schools. Aspects to be emphasized include physical characteristics of community, background and aspirations of children and parents, and specialized teacher competencies, classroom management, planning, instructional materials, teaching strategies, and evaluation. All participating preservice teachers receive significant exposure to English language learners and students with special needs. Schools selected for student experiences are located in Philadelphia. May be substituted for EDUC 242 with program approval and completion of Step 1 for teacher certification.

Food and Nutrition

FDNT 110 - Careers in Food and Nutrition

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Prerequisite: Food and Nutrition major, University College students, or by permission

Explores career possibilities in food and nutrition. Clarifies professional goals and examines educational and experiential requirements necessary to attain goals.

FDNT 143 - Current Issues in Nutrition and Wellness

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces contemporary nutrition issues as they relate to personal food choices and overall health. Completion of FDNT 143 fulfills the Liberal Studies Dimensions of Wellness requirement. Other 143 courses will also fulfill this requirement, and any of these courses may be substituted for each other and may be used interchangeably for D/F repeats but may not be counted for duplicate credit.

FDNT 145 - Personal Nutrition

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Encourages students to practice and adopt food behavioral choices that can be applied to everyday life. Evidence-based information concerning weight control, nutrients, diseases, and lifecycle nutrition is presented. Appropriate for students who are not nutrition majors or minors. (Titled Introduction to Nutrition before 2014-15.)

FDNT 150 - Foods

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grade of "C" or better in FDNT 151, and CHEM 101 or CHEM 111

Basic principles of food: composition, sanitation, preparation, and preservation.

FDNT 151 - Foods Laboratory

Class Hours: 0

Lab/Discussion: 3

Credits: 1

Prerequisite: CHEM 101 or CHEM 111 or BIOL 104

Corequisite: Must be taken with FDNT 150

Applies basic principles of food preparation. Taken only by Food and Nutrition majors or Family and Consumer Science Education majors or by permission.

FDNT 212 - Nutrition

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: CHEM 102 or CHEM 112

Sources and functions of nutrients, interdependence of dietary essentials, and nutritive value of an optimum diet are studied. Attention given to varied conditions in human life.

FDNT 213 - Life Cycle Nutrition

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: FDNT 212 with a grade of "C" or better

A detailed study of nutrition during all stages of the human life cycle; current issues and research as they impact these developmental stages.

FDNT 245 - Sports Nutrition

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: FDNT 145 or FDNT 212

Emphasizes knowledge and application of sports nutrition principles. The impact of the macro- and micro-nutrients on physical performance is discussed in light of current scientific research and applied to realistic dietary recommendation for all types and levels of athletes.

FDNT 355 - Medical Nutrition Therapy I

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: FDNT 212 with a grade of "C" or better and BIOL 155 or 150/151

An interpretation of anthropometric, laboratory, clinical, and dietary data in nutrition assessment. Pathophysiology of and evidence-based medical nutrition therapy for caloric imbalance, diabetes, and cardiovascular diseases. Use of food exchange systems in diet prescription and menu planning.

FDNT 362 - Experimental Foods

Class Hours: 2

Lab/Discussion: 3

Credits: 3

Prerequisite: FDNT 150, FDNT 355 or concurrently, MATH 217

The experimental study of foods, relating chemical and physical properties to reactions and processes occurring in food systems.

FDNT 364 - Methods of Teaching Food and Nutrition

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: FDNT 213 with a grade of "C" or better

Focuses on nutrition education methods to support health-promoting dietary behaviors for different populations in a variety of settings. Provides experience in the development of theory-based educational programming via assessing needs, developing objectives, creating/selecting accompanying materials and activities, implementing appropriate instructional strategies, assessment, and evaluation.

FDNT 402 - Community Nutrition

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: FDNT 212

Nutritional implications of both good and poor nutrition for all age groups in home and community situations are studied. Corrective and preventive measures emphasized. Taught spring semester only.

FDNT 410 - Food, Nutrition, and Aging

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Junior status

Relationship of food to health maintenance and special dietary problems during the middle and later years.

FDNT 415 - Sustainable Nutrition

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Explores food system sustainability issues from farm to fork, including food production, preparation, processing, packaging, and distribution. Assesses the sustainability of current dietary recommendations and the environmental impact of food choices. Evaluates food security from a national and global perspective.

FDNT 422 - Public Health Nutrition and Epidemiology

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: FDNT 145 or FDNT 212 and MATH 214 or MATH 216 or MATH 217, or department permission

Identifies population-based needs and approaches for prevention and alleviation of diet-related conditions. Explores methodological issues involved in the design, conduct, analysis, and interpretation of studies investigating the relationship between nutritional status, diet, and disease. Examines the application of nutrition research related to nutrition assessment and program and policy design and evaluation to improve the nutritional status and health of diverse population groups.

FDNT 430 - Professional Topics in Food and Nutrition

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: FDNT 355, FDNT 364, HOPS 256, PSYC 101

Topics include promoting food and nutrition services and programs, career planning and development, ethical challenges to dietitians, quality assurance standards, and impact on the legislative process.

FDNT 455 - Medical Nutrition Therapy II

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: FDNT 355 with a grade of "C" or better

Pathophysiology of and evidence-based medical nutrition therapy for disorders of the gastrointestinal, renal, hepatic, and immune systems, inborn errors of metabolism, cancer. Nutrition support.

FDNT 458 - Advanced Human Nutrition

Class Hours: 4
Lab/Discussion: 0
Credits: 4

Prerequisite: CHEM 255 or CHEM 351, FDNT 355, MATH 217

An in-depth study of the nutrients and their function within the cell. Incorporation of the principles of physiology and biochemistry in the study of nutrition. Emphasizes applying current research and evaluation of research methodology. (Does not count toward MS degree in FDNT requirements.)

FDNT 463 - Nutrition Counseling

Class Hours: 2
Lab/Discussion: 3
Credits: 3

Prerequisite: FDNT 355, PSYC 101, FDNT 455 or concurrently

Use of intervention strategies in prevention and treatment of disease through diet. Supervised practicum (three hours per week) counseling clientele in normal and therapeutic nutrition.

FDNT 465 - Nutrition Counseling and Education

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: FDNT 213, FDNT 355, PSYC 101

Corequisite: FDNT 466

Focuses on nutrition counseling and education methods to support health-promoting dietary knowledge, attitudes, and behaviors for individuals and groups in community and clinical settings.

FDNT 466 - Nutrition Counseling and Education Lab

Class Hours: 0

Lab/Discussion: 2.75

Credits: 1

Prerequisite: FDNT 213, FDNT 355, and PSYC 101

Corequisite: FDNT 465

Development and experience applying nutrition counseling and nutrition education methods to support health-promoting dietary knowledge, attitudes, and behaviors for individuals and groups.

FDNT 470 - Human Food Consumption Patterns

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: One social science course

An exploration of human food consumption behaviors from food production to individual and societal consumption patterns. Influencing factors discussed include agronomic, economic, geographical, nutritional, political, sociological, and psychological factors. The ethics and morality of food distribution will also be discussed. Students may not enroll in this course if they have taken the corresponding section of LBST 499 Food and Culture.

FDNT 471 - Integrative Nutrition in Complementary and Alternative Healthcare

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: FDNT 145, FDNT 212 or departmental permission

Explores the foundation of complementary, alternative, integrative, and functional nutrition theories and practices. Differentiates among traditional, complementary, alternative, integrative, and functional nutrition models as related to food, supplements, herbs, and disease. Evaluates current research related to complementary, alternative, integrative, and functional nutrition.

FDNT 482 - Independent Study

Class Hours: var

Credits: 1-6

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost; must have earned 60cr
Students with interest in independent study of a topic not offered in the curriculum may propose a plan of study in conjunction with a faculty member. Approval is based on academic appropriateness and availability of resources.

FDNT 484 - Senior Seminar

Class Hours: 1
Lab/Discussion: 0
Credits: 1

Prerequisite: Senior status
Emphasizes individual review of food and nutrition literature with formal presentation and discussion of current research.

FDNT 493 - Internship

Class Hours: var
Credits: 3-12

Prerequisite: Must have earned 60cr
An opportunity to work away from the university in supervised situations at healthcare facilities, foodservice, community, or nonprofit organizations. Students receive career-related experiences. Must meet university internship requirements. White uniforms, including white shoes, are required for all lab courses in which food is prepared. Students must meet the professional dress requirements of the department.

Fine Arts

FIAR 101 - Introduction to Fine Arts

Class Hours: 3
Lab/Discussion: 0
Credits: 3

An exploration of visual art, theater, and music, examining their conceptual and aesthetic underpinnings, selected works, and their primary and similar functions in the expression of cultural, political, and personal views of the world around us. Class experience includes the analysis of at least one major work of each form, attending at least two live performances, viewing of selected works, and creative activities. If it should be necessary for a student who fails this course to take a D/F repeat, any one of the following courses may be substituted: ARHI 101, MUHI 101, THTR 101, DANC 102.

FIAR 401 - Creativity and Innovation in the Arts

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Focuses on contemporary big ideas in the arts, the connections between the arts, and the place of the arts in broader society and in further cultivating innovative thinking in the arts community. Promotes student development of new ideas into viable potential directions for their future professional lives.

Finance

FIN 143 - Financial Wellness

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Theories and principles related to the physical, mental, social and emotional wellness aspects of individual money management. Information is focused on building a sound financial foundation as a college student and can be applied throughout the life span to ensure future financial well-being. Successful completion fulfills the Liberal Studies Dimensions of Wellness requirement. Other 143 courses will also fulfill this requirement, and any of these courses may be substituted for each other and may be used interchangeably for D/F repeats but may not be counted for duplicate credit. Cross-listed with ECON 143/FIN 143.

FIN 300 - Personal Finance

Class Hours: 3

Lab/Discussion: 01

Credits: 3

Prerequisite: MATH 115, ACCT 201

Provides an opportunity for students to gain an in-depth understanding of the importance of personal finance. It is the first course as part of a track for those who are interested in becoming a Certified Financial Planner (CFP). This course does not fulfill the Dimensions of Wellness course requirement.

FIN 310 - Fundamentals of Finance

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Prerequisites for business majors: ACCT 202, MATH 214 Prerequisites for nonbusiness majors: ACCT 202, MATH 214 or MATH 217 (MATH 214 recommended)

The study of valuation models, financial statement analysis and forecasting, capital budgeting methods, and working capital management. Also includes an introduction to risk and return, capital markets and institutions, and security valuation.

FIN 315 - Financial Analysis Using Electronic Spreadsheets

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: BTED/COSC 101/IFMG 101

Develops the financial students' computer modeling and analysis skills. Teaches how to utilize current computing resources, electronic spreadsheet, and other computing software to analyze, model, and solve a variety of financial problems.

FIN 320 - Corporate Finance

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grade of "C" or better in FIN 310

The study of corporate financial management and decision making, its theory, and application. Provides a higher level of study and many of the same topics covered in FIN 310, particularly in the area of capital budgeting. Other topics include capital asset pricing models, costs of capital, capital structure, leasing bond refunding, and financial distress.

FIN 323 - Retirement Planning

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: FIN 300 and FIN 310

Introduces retirement planning concepts from both the employer/employee and individual client perspectives, via theory-based lectures and case studies. Examines the relationships between retirement plans and legal, tax, insurance, and other concepts as they relate to effective financial planning.

FIN 324 - Principles of Investments

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: FIN 310

An introduction to securities markets, trading, and valuation. Topics include security types and characteristics, the mechanics of trading, valuation models for fixed-income securities and common stock, mutual fund evaluation, basics of options and futures, and tax-advantaged investments.

FIN 360 - Insurance and Risk Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: FIN 310

Covers the nature of risk, the application of the risk management process to business risk management problems, and the essentials of insurance contracts and insurance markets. Discusses appropriate methods of risk control and risk financing. The primary focus is on accidental losses resulting from situations involving pure risks, although financial risk management techniques for dealing with speculative risks are introduced.

FIN 365 - Student Managed Investment Portfolio I—Valuation

Class Hours: 1.5

Lab/Discussion: 0

Credits: 1.5

Prerequisite: Finance and accounting majors or instructor permission

Applies empirical and theoretical concepts to real-world portfolio management and investment decisions. Different investment strategies and valuation models are used to reinforce investment principles and practices learned in previous finance courses.

FIN 366 - Student Managed Investment Portfolio II—Performance

Class Hours: 1.5

Lab/Discussion: 0

Credits: 1.5

Prerequisite: FIN 365

Students assess the performance of a stock portfolio managed by their peers. Performance measures focus on risk and return and include financial ratio analysis and benchmark comparisons.

FIN 400 - Estate Planning

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: At least 90 earned credit hours

Introduces legal, tax, insurance, financial, and other principles relating to estate planning via a combination of theory-based lectures, case studies, and simulations.

FIN 410 - Financial Institutions and Markets

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: FIN 324

A review of the structure of financial institutions and money and capital markets. Provides the knowledge of the theory and practices of managing financial institutions, with particular emphasis on the management of financial risks.

FIN 420 - Investment Analysis

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: FIN 320, FIN 324

Integrates the work of the various courses in the finance areas and familiarizes the student with the tools and techniques of research in the different areas of investments.

FIN 422 - Seminar in Finance

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: FIN 320, FIN 324, seniors only

Primarily for the senior finance major, covers topics in all areas of finance by using recent articles, cases, discussions, speakers, and a financial simulation game.

FIN 424 - International Financial Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: FIN 310

The financial management concepts, useful in a single-country context, are adapted for the international variables and constraints caused by being international. Provides insight into unique issues and problems the manager of the multinational enterprise will face, such as working capital management, capital budgeting process, financing and investing abroad, capital and money markets, foreign exchange markets, and risk management.

FIN 425 - Financial Derivatives

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: FIN 320 and FIN 324 or equivalent/permission for FIN 425 and FIN 324 or equivalent/permission for FIN 525

Provides an understanding of how the derivatives markets work, how they are used, and how prices are determined. Includes the common types of derivatives, their characteristics and properties, and trading methods and strategies. Also, covers fundamental pricing models based on arbitrage pricing theory, binomial, and Black-Scholes models.

FIN 426 - Seminar in Financial Planning

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: FIN 300, FIN 320, FIN 324, FIN 400

Integrates coursework in various personal finance areas with actual case applications.

FIN 481 - Special Topics

Class Hours: var

Credits: 3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 481 are offered primarily for upper-level undergraduate students.

FIN 482 - Independent Study

Class Hours: var

Credits: 3

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

Students with interest in independent study of a topic not offered in the curriculum may propose a plan of study in conjunction with a faculty member. Approval is based on academic appropriateness and availability of resources.

FIN 493 - Finance Internship

Class Hours: var

Credits: 3-12

Prerequisite: FIN 310, FIN 315, FIN 324; prior approval through advisor, faculty member, department chairperson, and dean; minimum cumulative 2.0 GPA; major 2.5 GPA

Provides practical experience in the finance field to develop knowledge and provide application of theory to actual problems in a nonclassroom situation. Three credits are awarded for at least 120 hours of on-site work, up to 12cr for at least 480 work hours. A maximum of 3cr may be applied toward the finance major area elective requirements. Additional internship credits must be used as business electives only.

Study Abroad and Comparative Literature

FNLG 121 - Humanities Literature

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 101

An exploration of literature and the methods of close reading. Through encounters with significant literary texts, students will investigate and analyze how literary meaning is constructed; how literature shapes and is shaped by its various contexts; and how literature enables critical inquiry into values. Includes literary texts by women and people from underrepresented communities. Also offered as ENGL 121. ENGL 121/FNLG 121 may be used interchangeably for D/F repeats; may not be counted for duplicate credit.

French

FRNC 101 - Basic French I

Class Hours: 4

Lab/Discussion: 0

Credits: 4

Prerequisite: Appropriate score on the placement test (WebCAPE score between 0 and 285)

For beginning students. Not open to native speakers, except by special permission of department. Students must achieve an appropriate placement test score to enroll (score between 0 and 285). Special focus on aural/oral skills. Students learn in a multimedia environment. Students converse and ask questions in simple present tense. They become acquainted with elements of daily lives of native speakers of French around the world. Attendance is mandatory. May not register for, or take a D/F repeat in, FRNC 101 when credit has already been received for a higher-numbered French course.

FRNC 102 - Basic French II

Class Hours: 4

Lab/Discussion: 0

Credits: 4

Prerequisite: FRNC 101, or qualifying score on the WebCAPE placement test (286-362), or instructor permission

For beginning students. Students must achieve an appropriate placement test score to enroll (score between 286 and 362). Special focus on aural/oral skills. Students learn in a multimedia environment. Students converse and ask questions in simple present tense. They can now express commands and directions and are introduced to the expression of punctual actions in the past. They further investigate the daily lives of native speakers of French around the world. Attendance is mandatory. May not register for, or take a D/F repeat in, FRNC 102 when credit has already been received for a higher-numbered French course.

FRNC 201 - Intermediate French

Class Hours: 4

Lab/Discussion: 0

Credits: 4

Prerequisite: FRNC 102, or qualifying score on the WebCAPE placement test (score above 362), or instructor permission

Continued study of French; development of listening, reading, speaking, and writing, but primary emphasis is on aural/oral skills. Students use a multimedia environment to learn to converse and ask questions in the past. Students learn the different way to express completed action that occurred at a specific time in the past vs. expressing an action that continued in the past over an indefinite, undetermined period of time; students review how to narrate and describe in the past, ask and give directions, talk about the future, avoid repetitions, learn to combine simple sentences, express and understand conditional sentences, express and understand subjective statements, and understand indirect discourse. Through the use of multimedia, students continue their inquiries into the daily lives of native speakers of French around the world. Attendance is mandatory. May not register for, or take a D/F repeat in, FRNC 201 when credit has already been received for a higher-numbered French course. Liberal Studies Humanities credit is given for this course.

FRNC 220 - Intermediate French Conversation

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: FRNC 201, or qualifying score on the WebCAPE placement test (score above 402), or instructor permission

Intensive work on communication skills with specific emphasis on spontaneous interpersonal speaking, discourse strategies, vocabulary building, and pronunciation. Required for all minors. Students may not register for, or take a D/F repeat in, FRNC 220 when credit has already been received for a higher-numbered French course.

FRNC 230 - Intermediate French Composition and Grammar

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: FRNC 220 or equivalent; may be taken concurrently

Intensive practice in written expression and communication in French together with a grammar review. Intermediate-level language course with the goal of fostering writing in French for a variety of practical purposes. Review and expansion of specific grammar points are integrated into each unit. Taught in French.

FRNC 281 - Special Topics

Class Hours: var
Lab/Discussion: 1
Credits: 3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 281 are offered primarily for lower-level undergraduate students.

FRNC 481 - Special Topics

Class Hours: var
Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times.

FRNC 482 - Independent Study

Class Hours: var
Credits: 1-3

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

Students with interest in independent study of a topic not offered in the curriculum may propose a plan of study in conjunction with a faculty member. An opportunity to engage in an in-depth analysis of some topic dealing with the French language and culture through consultation with a faculty member. Approval is based on academic appropriateness and availability of resources.

Fashion Merchandising

FSMR 112 - Fundamentals of Clothing Construction

Class Hours: 1
Lab/Discussion: 3
Credits: 3

Principles and techniques involved in fundamental clothing construction and fitting are analyzed. Directed laboratory experiences provide an opportunity to solve individual problems in garment structure through the application of principles.

FSMR 158 - Fashion Show Production

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Focuses on developing a practical understanding of fashion through image, language, and events. All aspects of production and management of fashion shows are addressed, including the importance of teamwork. (Offered as FSMR 358 before 2016-17.)

FSMR 180 - Introduction to Fashion

Class Hours: 3
Lab/Discussion: 0
Credits: 3

A survey of fashion careers and industry functions including design, production, retail channels, and current trends.

FSMR 195 - Computer Aided Design for Professionals for Fashion Professionals

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Explores the functions and tools of Adobe Illustrator and Photoshop in the creation of technical fashion drawings, manipulated photographs, trend boards, and textile patterns.

FSMR 215 - Textiles

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Sophomore standing

An interpretation of basic textile knowledge with emphasis on fiber, yarn, fabric structure, coloration, and fabric finishes. Discussions include importance of factors related to consumer information, protection, and satisfaction. (Offered as FSMR 314 before 2016-17.)

FSMR 252 - Aesthetics of Fashion

Class Hours: 3
Lab/Discussion: 0
Credits: 3

The study of contemporary apparel design and the relationship of design elements and principles to personal characteristics and social/professional orientation.

FSMR 258 - Fashion Brand Merchandising

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Focuses on contemporary concepts, phrases, branding terms, and theoretical frameworks for most fashion brand-relative activities. Applies concepts about the role of branding in fashion through projects, such as case studies, exercises, shadowing activities, and developing their own fashion brand.

FSMR 262 - Fashion Forecasting

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: FSMR 180

A study and an analysis of the global fashion society and the trends that emerge. Evolving styles, changes in buying habits, and economic conditions are assessed to predict fashion consumer behavior. An emphasis on the interrelationships among apparel industry segments and the application of fashion theories to the forecasting process.

FSMR 280 - Introduction to Apparel Buying

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: FSMR 180 with a grade of "C" or better and ACCT 201

Focuses on using mathematical concepts in merchandising applications used for apparel buying. Students develop and determine assortment plans, cost of merchandise, profitability, and retail sale prices.

FSMR 281 - Special Topics

Class Hours: var

Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 281 are offered primarily for lower-level undergraduate students.

FSMR 303 - Visual Merchandising

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Junior standing

Students design and arrange display and selling areas in relationship to merchandising trends and consumer demands. Emphasizes promotion techniques and merchandise sales through effective use of space, design, and color.

FSMR 357 - Global Issues in Textiles and Apparel

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Junior standing

The study of the global textiles and apparel industry with emphasis on the US textile complex and the US market within an international context.

FSMR 380 - Applications in Apparel Buying

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: FSMR 280 with grade of "C" or better

Focuses on the development of a six-month stock and sales plan for a retail business using computer applications. Includes projecting retail sales, controlling inventory, calculating the amount of merchandise to purchase, determining markup percentages, and effectively using markdowns to manage inventory.

FSMR 385 - Ready-to-Wear Analysis

Class Hours: 1
Lab/Discussion: 3
Credits: 3

Prerequisite: FSMR 112

An examination and evaluation of the quality of ready-to-wear apparel through construction, style, fit, marketability, and price.

FSMR 434 - Quality Control in Textiles

Class Hours: 1
Lab/Discussion: 3
Credits: 3

Prerequisite: FSMR 215

Physical properties explored through microscopic examination and use of textile testing equipment for fabric analysis.

FSMR 456 - Historic Costume

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Junior standing

A chronological study of historic costume from ancient times to the present day with emphasis on the effect of aesthetic, economic, geographic, political, religious, and social factors on the design of clothing worn.

FSMR 468 - Supply Chain Management in Textiles and Apparel

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Junior standing or above

Examines supply chain management for textile and apparel products through the network of suppliers, manufacturers, distributors, retailers, and customers. Emphasis is placed on the dynamic nature of supply chain management in the global textile and apparel industry and the interrelationships among the segments of the textile-apparel-retail complex.

FSMR 480 - Professional Development in the Fashion Industry

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Senior standing

Knowledge gained in major and additional requirement courses is applied to individual career goals. Students have the opportunity to pursue related areas not directly covered in previous course work, with emphasis on independent research, analytical thinking, and communication skills.

FSMR 481 - Special Topics

Class Hours: var
Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 481 are primarily for upper-level undergraduate students.

FSMR 482 - Independent Study

Class Hours: var

Credits: 1-3

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

Particular consumer considerations are independently investigated in the areas of housing, home equipment, interior design, clothing, and textiles, or in the management of resources. Students meet with a faculty member at least five hours per credit. May be repeated for a total of 3cr.

FSMR 493 - Internship

Class Hours: var

Credits: 1-12

Prerequisite: Approval of instructor and department chairperson; upper-level standing

A practical experience related to the student's major area of study with objectives, supervised experience, and evaluation. May be repeated for a total of 12cr. (Offered as CNSV 493 before 2016-17.)

Geography

GEOG 101 - Environment and Society

Class Hours: 3

Lab/Discussion: 0

Credits: 3

The physical environment is modified by human activities, largely as a consequence of the ways in which societies value and use earth's natural resources, but human activities and distributions are, in turn, influenced by earth's physical features and processes. These themes are addressed by examining the geography of environmental impacts such as tropical deforestation, global climate change, energy development, urban growth, and agricultural land use. Also considered are natural hazards such as hurricanes, earthquakes, volcanic eruptions, and flooding.

GEOG 102 - Geography of the United States and Canada

Class Hours: 3

Lab/Discussion: 0

Credits: 3

A conceptually based introductory-level geography course that focuses on the American landscape. Includes mapping culture regions; tracing settlement patterns; resource use; environmental perceptions; the interplay of urbanization, industrialization, post industrialization, and spatial mobility; the occurrence of economically disadvantaged landscapes; and the role individuals and society have in the creation of the geographic landscape.

GEOG 104 - World Geography: Global Context

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Relates theories of the discipline of geography to current world issues and global patterns. Emphasizes local versus global strategies of resource management, spatial legacies of colonialism, contemporary multiscale issues with workforce migration, urban structure, disease, and globalization. Focuses on global patterns of development through comparative approaches and understanding of human and physical geographic characteristics of world regions.

GEOG 105 - Our Digital Earth: Mobile Devices, Web Applications, and Geospatial Technology

Class Hours: 3
Lab/Discussion: 0
Credits: 3

An overview of evolving geographically-enabled (geospatial) technologies and applications, and explores the wide-ranging impacts of geospatial technology on human decision-making, perceptions, and society. Covers location-based services, including personal navigation, global positioning systems (GPS), web-based mapping services, and social networks with real-time location information commonly found on personal mobile devices such as phones, tablets, and personal computers. Explores the technologies and societal implications of our digital planet with particular focus on the geospatial technologies that make geographically-enabled mobile and web applications possible.

GEOG 109 - Geographic Information Science and Systems for Energy Applications

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Provides students with knowledge of the theoretical basis of Geographic Information Systems (GIS) and geospatial technologies and their application for the energy sectors. Covers the specifics of selected GIS and database software packages. Develops skills to conceptualize energy-related GIS applications, use GIS software packages, manipulate and query geographic data to solve problems, perform simple spatial analysis, and understand how to utilize GIS for energy-related analyses.

GEOG 213 - Cartography and Map Design

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Introduces principles of thematic map construction. Emphasizes techniques of choropleth mapping and the production of scientific graphs and charts. (Also offered as RGPL 213; may not be taken for duplicate credit.)

GEOG 222 - Geography of National Parks

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Analyzes the spatial characteristics of America's National Park System. Examines the national parks idea with respect to wilderness conservation, preservation, and public presentation of natural and historic sites and landscapes; investigates the physical geography of national parks as defined by ecoregions (physiography, climate, natural vegetation); and evaluates landscape designs within the National Parks System relative to dominant planning techniques of the past and present.

GEOG 230 - Cultural Geography

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Introduces cultural geography, including folk and popular culture, religion, language, ethnicity and race, population, agriculture, urban and political geography, human relationships with the natural environment, culture regions, cultural diffusion, cultural interaction, globalization, and cultural landscapes.

GEOG 231 - Economic Geography

Class Hours: 3
Lab/Discussion: 0

Credits: 3

An introduction to geographic concepts, methods, and skills related to spatial patterns of production, consumption, and exchange over the earth's surface. Emphasizes a global perspective using a combination of theoretical and empirical concepts.

GEOG 232 - Urban Landscapes

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces basic concepts of urban morphology and landscapes including site, situation, function, urban land use, urban structure, and urban hierarchy. Explores relationships between urban structure and urban planning. (Also offered as RGPL 232; may not be taken for duplicate credit.)

GEOG 251 - Geography of Pennsylvania

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Regions of Pennsylvania are examined in detail to identify man-environment relationships. Soils, topography, climate, vegetation, population, and economic patterns are studied.

GEOG 254 - Geography of Russia, Central Eurasia, and Eastern Europe

Class Hours: 3

Lab/Discussion: 01

Credits: 3

Examines the Russian Federation, former Soviet satellites, and the European and Asiatic successor states. The region is the realm of Eurasian languages, historical schisms between eastern and western Europe, and the geographical legacies of the Tsarist and Soviet empires. Topics include terrain and environment, population, economic regions, resources, and geopolitics. These are studied in the context of environmental location and position between Eastern and Western power centers of the 21st century.

GEOG 255 - Geography of Africa

Class Hours: 3

Lab/Discussion: 0

Credits: 3

A critical geographic analysis and understanding of Africa, and the continent's level of development against the background of traditional misconceptions about the region. Offers a survey of the human geography and physical resources of contemporary Africa in a historical and global context. Covers a broad range of topics, including Africa, in historical perspective, physical geography, human-environment interactions, population dynamics, culture and change, economic and agricultural development, urbanization and migration, and political geography.

GEOG 257 - Geography of South and Southwest Asia

Class Hours: 3

Lab/Discussion: 01

Credits: 3

A geographical exploration and analysis of South and Southwest Asia. A survey overview of the complex physical and human geographies of the region, including demographic transition, gender inequalities, issues of development in the postcolonial global era, religious diversity, the Israeli-Palestinian conflict, US foreign policy toward the region, the exploitation of resources (particularly oil), terrorism, and the rise of radical Islamist movements. (Titled Geography of South and Southeast Asia before to 2014-15.)

GEOG 261 - Geography of Wine

Class Hours: 3

Lab/Discussion: 0

Credits: 3

The geography of the grape, its production, products, social significance, and consequences of the global wine trade are explored. Students develop an appreciation for the environmental constraints and characteristics of wines and wine regions. Field trips to visit wineries are an essential element. Verifiable proof of 21 years of age required for voluntary wine-tasting activities.

GEOG 314 - Map and Photograph Interpretation

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Maps and air photographs, along with remote sensing materials, permit inventory, and analysis of geologic, land use, urban development, and other landscape phenomena. The understanding of these materials and associated tools for their use is presented. (Also offered as RGPL 314; may not be taken for duplicate credit.)

GEOG 316 - Introduction to Geographic Information Systems

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Presents automated methods for creating, maintaining, and analyzing spatial data. Includes (1) specialized GIS hardware and software; (2) vector vs. raster vs. object-oriented spatial data structures; (3) creation and manipulation of geographic data files; (4) database design and management concepts; (5) spatial analysis; and (6) cartographic design. (Also offered as RGPL 316; may not be taken for duplicate credit.)

GEOG 331 - Population Geography

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Spatial variations in numbers, characteristics, and dynamics of human population, models, and theoretical constructs relevant to demographic structures and processes are studied, as well as major world and regional problems.

GEOG 333 - Trade and Transportation

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Deals with the spatial aspects of transportation systems and their use. Discusses circulation, accessibility, time and distance concepts, and trade patterns. (Also offered as RGPL 333; may not be taken for duplicate credit.)

GEOG 334 - Political Geography

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Geographic factors and conditions are analyzed as they relate to the character and function of states. Political institutions are evaluated in light of geographic conditions.

GEOG 336 - Social Geography

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Examines spatial dimensions of American society emphasizing the patterns and places that result from the human use of space. Explains how social theory has influenced the discipline of geography with respects to understanding space from a positivist, humanist, and structuralist perspective, and how this has changed with the shift from modern to postmodern interpretations of place. This understanding of social theory is the base for using positivist techniques involving census statistics and mapping procedures to analyze spatial patterns associated with social landscapes including, race, ethnicity, socio- economic status, migration and neighborhood change. Social theory also underpins class discussions and exercises exploring human spatial behavior, environmental perception, and place identity.

GEOG 337 - Historical Geography

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Includes studies of past geographies, geographical change through time, and historical perspectives on the cultural landscape. Emphasizes historical geography of the United States.

GEOG 341 - Climatology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Examines the elements of weather and climate on earth. The location and causes of global climatic regions are examined in relation to moving pressure and wind systems. Also considers the climatic history of the planet and recent human modifications of the atmospheric environment. (Also offered as RGPL 341; may not be taken for duplicate credit.)

GEOG 342 - Physiography

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Focuses on landform types and their spatial distribution. Emphasizes the tectonic forces that build landforms and the weathering and erosional processes that erode and shape surface features. The relationship between human activities and landforms is also considered. (Also offered as RGPL 342; may not be taken for duplicate credit.)

GEOG 343 - Fresh Water Resources

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Focuses on surface and groundwater as a resource with unique properties. Fresh water is defined physically by storage in the hydrologic cycle and the values assigned by different cultures. Problems featured relate to consumptive and withdrawal water uses, the problems of water supply and scarcity, water law and its inconsistencies, flooding and floodplain management, sources of contamination and pollution, wetlands, and case studies of selected river basins. (Also offered as RGPL 343; may not be taken for duplicate credit.)

GEOG 345 - Biogeography for Environmental Managers

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: One course from GEOG 341, GEOG 342, BIOL 103, BIOL 115

Examines the distribution of plants and animals across the earth's surface, as influenced by natural and human processes. Emphasizes landscape and regional habitat dynamics as they relate to environmental planning and management. Field trips supplement lectures and readings. (Also offered as RGPL 345; may not be taken for duplicate credit.)

GEOG 404 - Transportation Planning

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: GEOG 333/RGPL 333 or RGPL 350 or one course from the Economic Geographer Concentration

Introduces the major themes and methods of transportation planning, particularly in an urban context. It is project oriented and supported by readings from the scholarly literature covering themes such as modes of transit, land use implications, and commercial development. Reading assignments are organized topically and coordinated with two workbook projects that develop applied skills. Topics include theory, empirical description, and methodological practice. (Also offered as RGPL 404; may not be taken for duplicate credit.)

GEOG 409 - Spatial Analysis Applications in the Energy Sectors Workshop

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: GEOG 109

Characterizes the spatial representation and analysis techniques used by public, private, and nonprofit entities engaged in the energy industries. Focuses in particular on the implementation of energy resource applications including exploration and development, environmental and cultural compliance, logistics, production analysis, and infrastructure maintenance.

GEOG 411 - History of Geography

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: GEOG 230 and at least 9 other GEOG credits

Deals with history of the discipline, great ideas, major scholars, leading problems, and unresolved issues.

GEOG 415 - Introduction to Remote Sensing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces concepts, principles, methods, and theories applied in and through remote sensing of the earth's physical and cultural features. Includes understanding the physical principles of the electromagnetic spectrum, the technological underpinnings of a variety of sensors, and applications of these technologies. Applies industry standard software packages in the geospatial sciences to illustrate course concepts and build software recognition and application skills. (Also, offered as RGPL 415; may not be taken for duplicate credit.)

GEOG 419 - Geographic Information Systems (GIS) for Environmental Applications

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: 60 completed credits or instructor permission

Provides knowledge of the theoretical basis of geographic information systems (GIS) and its applications for environmental scientific analysis. In the process of demonstrating some of the capabilities of GIS, the specifics of selected GIS and database software packages will also be covered. Students develop the skills to use GIS packages, manipulate and query geographic data to solve problems, perform simple spatial analysis, and understand how to utilize GIS for environmental analysis and resource management.

GEOG 421 - Enterprise GIS Management

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: GEOG 424 or instructor permission

Principles and methods for creating, operating, maintaining, and managing data for multiuser geospatial information systems are studied. Each student will customize, document, and operate a multiuser geographic information system of his or her design. (Also offered as RGPL 421; may not be taken for duplicate credit.)

GEOG 424 - Technical Issues in Geographic Information Systems

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: GEOG 316 or GEOG 419

Uses project-based approach to develop and maintain a geographic information system (GIS). Designs and implements functional systems through cooperative learning. Covers methods for designing GIS to user specification, data collection, data input, project management, and system documentation. (Also offered as RGPL 424; may not be taken for duplicate credit.)

GEOG 425 - Global Positioning Systems (GPS) Concepts and Techniques

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: 60cr completed or instructor permission

Provides knowledge of the theoretical basis and practical applications of global positioning systems (GPS). Students gain hands-on experience using GPS receivers and GPS observables, as well as the ability to determine point and relative position fixes from pseudorange and carrier phase measurements. Students are exposed to industry-standard GPS hardware and software, as well as appropriate techniques for processing GPS data to achieve necessary levels of horizontal and vertical positional accuracy. Integration of GPS and geographic information systems (GIS) will also be discussed.

GEOG 435 - Geography of Energy

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Covers patterns and problems of energy production and consumption in human societies. Descriptions of what, where, and how much are combined with issues such as technological change, conservation, allocation, environmental impacts, and economic development. Specific topics include global history and trends of energy development, pricing systems, types of energy, locations of production areas, and the energy status of the United States.

GEOG 440 - Conservation: Environmental Analysis

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Problems of exploitation and utilization of regional resources such as soils, minerals, forests, and wildlife are considered in relation to population growth and regional planning and development. (Also offered as RGPL 440; may not be taken for duplicate credit.)

GEOG 444 - Energy Development and Compliance

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: GEOG 435 or instructor permission

Reviews and characterizes energy resources found in northern Appalachia and the logic and techniques used to identify, quantify, and regulate their development and extraction. Focuses in particular on the spatial dimensions of shale gas, coal, and wind as major energy sources in northern Appalachia and deals with topics such as exploration, environmental and cultural compliance, logistics, production analysis, and infrastructure maintenance.

GEOG 454 - GIS Analysis of Public Health

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: GEOG 316/RGPL 316 or GEOG 417

Employs GIS-based public health analysis methods that are employed to understand the distribution and nature of public health problems, health disparities and access to health care services, and potential location-based strategies or interventions. Demonstrates knowledge of cartographic and spatial analyses and how they are used in the field of Public Health. Explores typical spatial public health analysis techniques, as well as demonstrates the ability to select appropriate data and analytical methods to implement GIS-based analyses.

GEOG 455 - Advanced Remote Sensing

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: GEOG 415/RGPL 415

Expands beyond basic principles of remote sensing to understand and apply complex methods of data collection, normalization, and analysis. May cover radiometric normalization, spectral transformations, change detection, object oriented classification, spatial analysis and filtering, accuracy assessment, and application of learned techniques. A research-intensive experience with a project and paper demonstrating acquired knowledge and application of techniques to a variety of physical and human processes. (Also offered as RGPL 455; may not be taken for duplicate credit).

GEOG 460 - Foundations of Unmanned Aerial Systems Science and Applications

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Introduces fundamental aspects of unmanned aerial systems (UAS), including relevant federal, state and local regulations. Covers UAS functionality, including components, technology and operational issues. Examines scientific technological principles underlying UAS flight and data acquisition. Covers UAS component evaluation and assembly, pre-flight procedures, flight mission planning, and execution of basic flight skills.

GEOG 462 - Planning Policy, Implementation, and Administration

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: RGPL 350

Focuses on the planning and implementation of policies to manage the location, timing, type, and intensity of land development. Explores the multi-step process from community plan to project completion. Exposes students to the public environment in which community plans are developed and implemented and walks them through the real-world problems of identifying projects, building agency and interagency consensus, finding funding, putting together a project plan, project management, personnel, and budget to project completion. (Also offered as RGPL 462; may not be taken for duplicate credit.)

GEOG 463 - Unmanned Aerial Systems for Remote Sensing and Spatial Data Acquisition

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: GEOG 460

Examines concepts and techniques involved in the implementation of Unmanned Aerial Systems (UAS) for the collection of remote sensing and spatial data acquisition. Emphasizes acquisition of the knowledge and skills necessary to undertake manual and automated UAS flights for spatial data acquisition, such as: fundamental photogrammetry concepts, UAS mission planning, GPS/GNSS ground control, UAS airborne navigation, and processing of UAS-collected data into data deliverables.

GEOG 475 - Spatial Analysis Techniques

Class Hours: 3
Lab/Discussion: 01
Credits: 3

Prerequisite: GEOG 316 or GEOG 419

Presents concepts underlying spatial analysis techniques and provides hands-on experience operationalizing spatial analysis methods through use of Geographic Information Systems (GIS) hardware and software.

GEOG 481 - Special Topics

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 481 are primarily for upper-level undergraduate students. (May also be offered as RGPL 481; may not be taken for duplicate credit under same title.)

GEOG 484 - Field Studies in Geography and Social Studies

Class Hours: var
Credits: 1-3

Prerequisite: Instructor permission

Immerses the student in a regional environment. Helps the student to see critically and to interpret a cultural landscape. The experience is predominantly off campus. Using a combination of structured field exercises, culturally specific readings, primary and secondary data, and standard geographic field techniques, the course strives to develop a deeper affective and cognitive understanding of a cultural region. May be repeated under a different study area title.

GEOG 485 - GIS Application Development

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: GEOG 316/RGPL 316

Designed to provide students with exposure to current industry-standard techniques for developing customized geographic information systems applications to accomplish mapping, analysis and geoprocessing functions. Covers GIS modeling, object-oriented programming, GIS software development, and customization of "out-of-the-box" GIS software to meet user functionality and interface specifications.

GEOG 488 - Geospatial Intelligence Capstone

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: GEOG 213 or RGPL 213, GEOG 316 or RGPL 316, GEOG 415 or RGPL 415, and MLSC 201 or PLSC 465

Synthesizes concepts, skills, and techniques learned in prerequisite courses in the Geospatial Intelligence certificate curriculum to develop an applied geo intelligence project. Includes spatial data acquisition, processing, analysis and reporting to geospatial intelligence tradecraft standards, as well as a culminating presentation of the project.

GEOG 493 - Internship

Class Hours: var
Credits: 3-12

Professional learning experience with emphasis on application of academic background. Open to majors and minors in geography with a total of 60cr and 15cr in the major. See internship supervisor for additional information.

GEOG 498 - Research Seminar

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: GEOG 411

This senior seminar and workshop constitute a capstone course that focuses on recent research in the major field. Students carry out an applied research project on a topic of local or regional importance. (Also offered as RGPL 412; may not be taken for duplicate credit.)

GEOG 499 - Independent Study

Class Hours: var
Credits: 3-6

Independent research and study under faculty direction. Interested students should approach department chairperson for information.

Geoscience

GEOS 101 - The Dynamic Earth

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: No geoscience majors/minors

Examines the constant changes that affect the rocky surface of our planet. From volcanic eruptions and catastrophic earthquakes to the slow drift of continents and passage of ice ages, earth processes have shaped the history of life and altered the development of human civilization.

GEOS 102 - The Dynamic Earth Lab

Class Hours: 0

Lab/Discussion: 2

Credits: 1

Prerequisite: No geoscience majors/minors

Corequisite: Enrollment in GEOS 102 requires corequisite or previous enrollment in GEOS 101

Introduces the techniques geologists use to study the earth and reconstruct its past. Labs cover minerals, rocks, map interpretation, and fossil identification and may include field trips during the scheduled lab period.

GEOS 103 - Oceans and Atmospheres

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: No geoscience majors/minors

The earth's oceans and atmosphere play a crucial role in determining the pace and extent of changes occurring to our global environment. Examines the composition and character of these components and their interaction with other major components of the earth system.

GEOS 104 - Oceans and Atmospheres Lab

Class Hours: 0

Lab/Discussion: 2

Credits: 1

Prerequisite: No geoscience majors/minors

Corequisite: Enrollment in GEOS 104 requires corequisite or previous enrollment in GEOS 103

Introduces the techniques oceanographers and meteorologists use to study the earth's oceans and atmospheres and reconstruct their evolution. Labs cover seawater processes, oceanic circulation, marine life, atmospheric structure, and weather.

GEOS 105 - Exploring the Universe

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: No geoscience majors/minors

Examines the history of time; the reasons for the seasons; the characteristics of the planets, moons, stars, and galaxies; and the history and future of space exploration.

GEOS 106 - Exploring the Universe Lab

Class Hours: 0

Lab/Discussion: 2

Credits: 1

Prerequisite: No geoscience majors/minors

Corequisite: Enrollment in GEOS 106 requires corequisite or previous enrollment in GEOS 105

Introduces the techniques astronomers use to study the nature and motions of objects in the sky, including the sun, moon, planets, and stars. Includes two observations held at night.

GEOS 111 - Earth and Environmental Systems

Class Hours: 3

Lab/Discussion: 2

Credits: 4

Prerequisite: Designed for freshman and sophomore students in disciplines that require a deeper understanding of the Earth's systems, particularly science education, anthropology, geography and geoscience majors.

Examines environmental science from an Earth systems science perspective. Introduces the interactions between various systems that make up the Earth's critical zone (near-surface interface between humans and our planet's atmosphere, biosphere, lithosphere and hydrosphere). Explores spatial and temporal variation of environmental processes through the use of hands-on data collection, manipulation and modeling.

GEOS 119 - Geology of Energy Resources

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Examines the geological environments that create energy resources. Compares patterns of energy development globally and nationally with particular emphasis placed on the development of Pennsylvania's energy resources. Studies relationships of environmental impacts to current levels of energy use, both in terms of climate and water. Culminates with a look at factors that affect future energy demand in terms of population growth and standard of living.

GEOS 150 - Geology of National Parks

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: No geoscience majors/minors

Explores geological processes and earth history using the classic rock formations of America's national parks. Includes national parks such as Arches, Bryce Canyon, Carlsbad Caverns, Grand Canyon, Great Smokies, Mammoth Cave, Shenandoah, Yellowstone, Yosemite, Zion, and others.

GEOS 151 - The Age of Dinosaurs

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: No geoscience majors/minors

A thorough introduction to dinosaurs and the world they inhabited. Topics include the most current theories regarding dinosaur biology (behavior, metabolism, evolution), ecology (greenhouse climate, associated fauna and flora), and extinction (asteroid impact, volcanism, climate change).

GEOS 152 - Physical Resources of the Earth

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: No geoscience majors/minors

An introduction to mineral, energy, and water resources of the earth; genesis of ore depositions; exploration, exploitation, and utilization of resources; impact of exploitation of resources on the environment and on humankind.

GEOS 154 - Human Exploration of Space

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: No geoscience majors/minors

Covers the history, technical considerations, and scientific and social issues of the exploration of the planets and smaller objects of the solar system. Early rocketry, the race to the Moon, and past robotic missions provide a perspective to consider current and future science missions and human settlement beyond earth. Includes field observations and activities that may occur on evenings and weekends.

GEOS 155 - Geology of Climate Change

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Examines the geologic factors which control Earth's climate; how that climate has varied through Earth's history; how anthropogenic climate change is different from changes previously experienced on Earth; and how anthropogenic climate change is affecting the planet.

GEOS 156 - Geology of Natural Disasters

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Explores the science behind natural disasters, including earthquakes, landslides, floods and volcanic eruptions. Students will investigate the geologic processes that impact the surface of the Earth and endanger human lives. By understanding the science behind these processes, students will learn to recognize known risk factors, minimize their vulnerability to disaster, and weigh the consequences to society of living in disaster-prone regions.

GEOS 201 - Foundations of Geology

Class Hours: 3
Lab/Discussion: 3
Credits: 4

Prerequisite: Geoscience majors/minors, social studies education majors/ minors, anthropology, geography, and regional planning majors, or instructor permission

An introduction to the geological sciences, including the study of the earth's interior; plate tectonics; minerals and crystallography; igneous, sedimentary, and metamorphic rocks and their cycling; geologic time; crustal deformation; and earthquakes. Laboratory exercises will emphasize hands-on learning of basic geology skills including mineral and rock identification, understanding the geometry of subsurface geologic structures, and topographic and geologic map reading.

GEOS 202 - Quantitative Methods in the Geoscience

Class Hours: 2
Lab/Discussion: 0
Credits: 2

Prerequisite: Geoscience or earth and space science education majors/ minors only, or instructor permission; must be taken after or concurrently with GEOS 201

A quantitative introduction to the geological sciences, including the study of the earth's interior; plate tectonics; minerals and crystallography; igneous, sedimentary, and metamorphic rocks and their cycling; geologic time; crustal deformation; and earthquakes. Introduces students to foundational mathematical skills and techniques used in the geosciences.

GEOS 203 - Surficial Processes

Class Hours: 3
Lab/Discussion: 3
Credits: 4

Prerequisite: Grade of "C" or better in GEOS 201

Introduces students to the geological processes that shape the earth's surface, from uplift and erosion of mountains to the transport of sediment and subsequent formation of sedimentary rocks. Focuses on the interaction of underlying tectonic forces with the natural cycles of the earth's atmosphere and hydrosphere and the subsequent evolution of both landscape and surface deposits.

GEOS 204 - Historical Geology

Class Hours: 3
Lab/Discussion: 3
Credits: 4

Prerequisite: Grade of "C" or better in GEOS 201

An introduction to the historical development of geology as a scientific discipline and an overview of the methods used by geologists to reconstruct the Earth's past history. Studies the rock and fossil record in lecture, lab, and field outcrops to discover how our planet formed, how plate tectonic activity shaped ocean basins and continents, how geologic processes created economic resources, and how the history of life is recorded by ancient rock deposits. Includes required field trips on weekends. (Offered as GEOS 351 before 2015-16.)

GEOS 301 - Mineralogy

Class Hours: 3
Lab/Discussion: 3
Credits: 4

Prerequisite: Grade of "C" or better in GEOS 201

An introduction to crystallography, crystal chemistry, physical properties, optical properties, and phase equilibria of minerals pertinent to geology and economic resources. Laboratory exercises focus on mineral identification and interpretation as well as analytical techniques such as x-ray diffractometry and optical microscopy

GEOS 302 - Structural Geology

Class Hours: 3
Lab/Discussion: 3
Credits: 4

Prerequisite: Grades of "C" or better in GEOS 201

A study of the geometry, kinematics, and dynamics of the primary structures of the earth's crust. Focuses on the geometric relations between geologic contacts and surface topography, the description of primary structures such as foliations, lineations, folds and fractures, the constraints on crustal motions, and the relation between stress and strain. Students are introduced to the tools of rock mechanics and spherical geometry. The laboratory includes extensive work with geologic maps and profiles, the Brunton compass, and orthographic and stereographic projections. Includes field trips that may occur on weekends.

GEOS 303 - Field Geology

Class Hours: 3
Lab/Discussion: 3
Credits: 4

Prerequisite: Grade of "C" or better in GEOS 201

Principles and techniques of field geology with an emphasis on developing field skills using a Brunton compass, topographic maps, Jacobs staff, stereographic projections, field computers, and the global positioning system. Field projects involve techniques of field note taking, measuring and describing stratigraphic sections, bedrock mapping and analysis, environmental assessment, and construction of geologic maps and structure sections. Includes field trips that may occur on weekends.

GEOS 310 - Environmental Geology

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: Grade of "C" or better in GEOS 203

The study of human interactions with the earth from a geological perspective. An emphasis is placed on the scientific concepts necessary to understand these interactions, including groundwater flow, soil formation and destruction, waste disposal, geologic hazards, stream hydrology, climate change, and natural resources. Contemporary environmental issues are explored through primary scientific literature and news media. Includes field trips that may occur on weekends.

GEOS 311 - Geochemistry

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: CHEM 111, MATH 121, grade of "C" or better in GEOS 201

An introduction to low-temperature chemistry of the earth's surface and near-surface; includes discussions of chemical activity, solution chemistry, organic geochemistry, trace elements, stable and radiogenic isotope geochemistry, and the chemistry of natural waters.

GEOS 312 - Hydrogeology

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: Grades of "C" or better in GEOS 201; MATH 121 or MATH 125 or instructor permission.

An overview of groundwater geology, including flow equations, aquifer flow equation, aquifer parameter testing, groundwater sampling techniques, and remediation of groundwater pollution. Labs emphasize graphical and analytical solutions as well as computer modeling of groundwater flow systems.

GEOS 323 - Geophysics

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: PHYS 111, MATH 121, grade of "C" or better in GEOS 201

An introduction to physics of the surface and interior of the solid earth, including earthquakes, propagation of earthquake waves, gravity field and interior structure, magnetic field and magnetic reversals, heat flow, geodesy, and tides. Techniques used for applied geophysical surveys are also examined.

GEOS 324 - Geology of Oil and Gas

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: Grade of "C" or better in GEOS 203

An in-depth exploration of the geological processes that create oil and gas resources in sedimentary rocks. Students also learn specific techniques used in the oil and gas industry for locating and extracting oil and gas reserves and study the environmental impacts caused by their development. Students also gain an understanding of the limited nature of fossil fuels.

GEOS 341 - Planetary Geology

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Corequisite: MATH 121, PHYS 111 or instructor permission

Materials, motions, and evolution of the solar system, with an emphasis on observational methods, mechanics, spatial relationships, geology, and origin of the solar system.

GEOS 342 - Stellar Astronomy

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Corequisite: MATH 121, PHYS 111 or instructor permission

Evolution and nature of objects in the universe, including the Sun, stars, and galaxies. A study of methods for gathering astronomical data on motion, distance, and composition.

GEOS 345 - Igneous and Metamorphic Petrology

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: Grade of "C" or better in GEOS 301

Introduces the origins of metamorphic rocks in the context of plate tectonic activity, emphasizing melting and crystallization processes as well as metamorphic reactions. Laboratory exercises focus on rock identification and interpretation on hand sample and petrographic microscopy. Includes field trips that may occur on weekends.

GEOS 352 - Stratigraphy

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: Grade of "C" or better in GEOS 203

An introduction to the concepts and methods applied in defining and establishing the spatial and temporal relationships of stratigraphic units—the material packages of sediment/rock and the intervals of time that are derived from them. Includes field trips that may occur on weekends.

GEOS 353 - Paleontology

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: Grade of "C" or better in GEOS 201

An introduction to the study of prehistoric life, the process and products of organic evolution, and the utility of fossils as tools for solving geological and paleobiological problems. Includes field trips that may occur on weekends.

GEOS 354 - Geomorphology

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: Grade of "C" or better in GEOS 203

A study of the origin of the earth's landforms, including relationship of geologic structure to landform types and role of geomorphic processes in landscape development.

GEOS 355 - Sedimentology

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: Grade of "C" or better in GEOS 301

A study of sediments and sedimentary rocks with emphasis on reconstruction of their origin, specifically depositional and post-burial history, from properties observed in outcrops, hand-specimens, and thin sections.

GEOS 356 - Coastal Processes and Geology

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: GEOS 203, geoscience majors/minors, and earth and space science education majors/minors, or instructor permission

The study of the origin and evolution of coastal environments from a geological perspective. Emphasis is placed on the quantitative investigation of the dominant processes (waves, tides, and currents) that create and modify these environments, as well as the role of human-induced change.

Contemporary issues in coastal geology are explored through primary scientific literature, news media, and laboratory exercises. Includes field trips that may occur on weekends.

GEOS 362 - Plate Tectonics

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: Grade of "C" or better in GEOS 201

Introduction to formal theory of plate tectonics. Topics include magnetic anomalies, first motion studies, thermal structures of the plates, kinematics, crustal generation, sea floor spreading, collision, and subduction deformation.

GEOS 363 - Volcanology

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: Grade of "C" or better in GEOS 201

Introduces volcanoes, volcanic eruption styles, and deposits in subaerial and submarine environments. Students assess risks and hazards associated with living near active volcanoes and discuss the cultural influences of volcanoes around the world throughout human history. Study of different types of volcanic eruptions through historical and pre-historical case studies. Laboratory exercises focus on rock identification and interpretation, fluid dynamics experiments, and learning laboratory and field skills of volcanologists that allow the determination of eruption dynamics.

GEOS 370 - Oceanography

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: Grade of "C" or better in GEOS 201

An introduction to physical, chemical, geological, and biological nature of the ocean: bathymetry, submarine geology, and sedimentary deposits. Includes field trip(s) that may occur on weekend(s).

GEOS 371 - Meteorology

Class Hours: 2

Lab/Discussion: 3

Credits: 3

Prerequisite: Grade of "C" or better in GEOS 201

An introduction to meteorological sciences; composition and structure of the atmosphere; radiation principles; elementary thermodynamics and heat balance.

GEOS 404 - Newfoundland Field Workshop

Class Hours: var

Credits: 3

Prerequisite: GEOS 403; instructor permission and valid passport required

A field course designed to utilize the exceptional and diverse geologic features of Newfoundland for instruction of departmental majors and minors in the tectonic analysis utilizing sedimentologic, stratigraphic, and paleontologic observations. (Three weeks, taught in the summer only.)

GEOS 405 - American Southwest Seminar

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Prerequisite: Grades of "C" or better in GEOS 201; instructor permission required

A seminar introduction to the geology of the American Southwest. Includes examination of Colorado Plateau stratigraphy, Basin and Range tectonism, and volcanic events in the eastern Sierra Nevada. Prepares students specifically for GEOS 406.

GEOS 406 - American Southwest Field Workshop

Class Hours: var

Credits: 3

Prerequisite: GEOS 405; instructor permission required

A field study of the major geologic features and relationships exposed in the American Southwest, including the Colorado Plateau, the Rio Grande Rift, Death Valley, and parts of the eastern Sierra Nevada in California. (Three weeks, taught in the summer only.)

GEOS 407 - Carbonate Geology Seminar

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Prerequisite: Grades of "C" or better in GEOS 201; instructor permission required

A seminar introduction to the geological environment and history of the carbonate rocks and sediments found in Florida. Includes instruction in the techniques of field analysis and geologic interpretation. Prepares students specifically for GEOS 408.

GEOS 408 - Carbonate Geology Field Workshop

Credits: 3

Prerequisite: GEOS 407; instructor permission

Two to three weeks of field study in Florida Keys and at Andros Island, Bahamas. Conducted from base camps in Florida Keys and at Forfar Biological Field Station (Bahamas) and consists of both land and marine studies of the different carbonate environments in the Keys, Florida Bay, and along the Atlantic reef tract. Valid passport and basic swimming skills required.

GEOS 409 - Geology of Shale Gas—Field Workshop

Class Hours: 2

Lab/Discussion: 3

Credits: 3

Prerequisite: GEOS 119

Intensive laboratory and field-based investigations of the geology of shale gas energy formation, development and extraction. Explores the geological formation and history of natural gas found in deep shale deposits and investigates technology used to extract these from the subsurface and how economic, environmental, and political factors influence the development of shale gas resources. Includes travel to field-based locations and rig-floor environments.

GEOS 470 - Research Planning

Class Hours: 2

Lab/Discussion: 0

Credits: 2

Prerequisite: 75cr or instructor permission

Exposes students to the methods of research in the geosciences by working on a project of their choosing. Students begin their capstone research by planning and initiating a project of their choosing. Working with a faculty advisor, students define a problem, do the background research to discover what is already known about it, propose several working hypotheses to solve it, and then present their capstone research proposal along with a review of the relevant scientific literature.

GEOS 475 - Data Interpretation

Class Hours: 2

Lab/Discussion: 0

Credits: 2

Prerequisite: GEOS 470, Senior standing

GEOS 480 - Senior Research

Class Hours: 2

Lab/Discussion: 0

Credits: 2

Prerequisite: GEOS 475, senior standing

Working closely with a research advisor, seniors complete their capstone research project and prepare a professional poster and oral presentation to effectively communicate their findings to an audience of faculty, alumni, and peers. Designed for seniors enrolled in all majors within the Geoscience Department.

GEOS 481 - Special Topics

Class Hours: var

Credits: 1-3

Prerequisite: As appropriate to course content

The department's intention is to use this course to schedule extended field trips and for teaching special courses that utilize the specialties of the Geoscience faculty.

GEOS 482 - Independent Study

Class Hours: var

Credits: 1-3

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

Independent study provides an opportunity to use library, laboratory, or field research in an area that is of interest under the supervision of a designated faculty member. Approval is based on academic appropriateness and availability of resources.

GEOS 490 - Field Studies in Geology

Class Hours: var

Credits: 1-4

Prerequisite: GEOS 301; instructor permission

Field-based geologic research in a variety of locations across the United States and the world. Through hands-on application, students learn how to formulate a field hypothesis, use field equipment to collect geological observations and samples, keep a field notebook, and create visual depictions of field data in the form of maps or cross-sections.

GEOS 492 - Soils and Soil Geochemistry

Class Hours: 2

Lab/Discussion: 3

Credits: 3

Prerequisite: Grade of "C" or better in GEOS 201

Introduces the ways in which archaeologists and geoscientists define, recognize, examine, and interpret soils in both the field and the laboratory. Examines (1) how the interactions of landform, topography, climate, and biota result in patterns of soil development and the distribution of soils that we observe within the landscape; (2) the significance of soils to other disciplines, including archaeology, Quaternary geology, and geoenvironmental science; and (3) how the physical, chemical, and biological properties of soils are influenced by human activities both past and present. Includes field trips that may occur on weekends. (Offered as GEOS 313 before 2016-17.) (Also offered as ANTH 492; may not be taken for duplicate credit.)

GEOS 493 - Geoscience Internship

Class Hours: var

Credits: 1-12

Summer or semester work experience with cooperating firms or agencies. May be scheduled only after consultation with advisor and chairperson. Requirements include up to three on-site consultations, depending on credits and location's site; completion of up to three oral progress reports; and submission of a detailed work diary. Restricted to junior and senior department majors; only 3cr may be applied toward major.

Gerontology

GERN 493 - Internship

Credits: 3

Prerequisite: Senior standing, all required courses

Supervised experience in public or private agency that serves aging clients.

German

GRMN 101 - Elementary German I

Class Hours: 4

Lab/Discussion: 0

Credits: 4

For beginning students. Introduction to the German language emphasizing communication through reading, writing, speaking, and listening. Focus on pronunciation and basic grammatical concepts to enable students to communicate in the present tense in a range of situations. They will be able to negotiate a limited number of personal needs and handle basic social interactions related to their daily lives. They become acquainted with a variety of cultural aspects of German-speaking countries. Attendance is required. May not register for or take a D/F repeat in GRMN 101 when credit has already been received for a higher-numbered German course.

GRMN 102 - Elementary German II

Class Hours: 4

Lab/Discussion: 0

Credits: 4

Prerequisite: GRMN 101 or equivalent

A continuation of GRMN 101. Emphasizing communication through reading, writing, speaking, and listening. Focus on pronunciation and expansion of grammatical concepts to enable students to communicate in present, past, and future tenses in a variety of situations. Students will be able to negotiate a limited number of personal needs, handle a range of interactions related to their daily lives, and manage simple social transactions. They expand their cultural knowledge of German-speaking countries. Attendance is required. Liberal Studies credit is given. May not register for or take a D/F repeat in GRMN 102 when credit has already been received for a higher-numbered German course.

GRMN 201 - Intermediate German

Class Hours: 4

Lab/Discussion: 0

Credits: 4

Prerequisite: GRMN 102 or equivalent

A continuation of GRMN 102. Emphasizing communication through reading, writing, speaking, and listening. Focus on pronunciation and expansion of grammatical concepts to enable students to communicate in present, past, and future tenses in a variety of situations. Students will be able to negotiate an increasing number of personal needs, handle a range of interactions related to their daily lives, and manage simple social situations and transactions. They expand their cultural knowledge of German-speaking countries. Attendance is required. Liberal Studies credit is given. May not register for or take a D/F repeat in GRMN 201 when credit has already been received for a higher-numbered German course.

GRMN 220 - Intermediate German Conversation

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: GRMN 201 or equivalent, or instructor permission

Intensive work on oral communication skills with specific emphasis on spontaneous interpersonal speaking, discourse strategies, vocabulary building, and pronunciation. Required for all minors.

GRMN 230 - Intermediate German Composition and Grammar

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: GRMN 201 or equivalent

Intensive practice in written expression and communication in German together with a grammar review. Intermediate-level course with the goal of fostering writing in German for a variety of practical purposes. Review and expansion of specific grammar points are integrated into each unit. Taught in German.

GRMN 281 - Special Topics

Class Hours: var

Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 281 are offered primarily for lower-level undergraduate students.

GRMN 372 - Childhood Enchantment: The Fairy Tale in German Culture and Literature

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Analyzes the role fairy tales have played in German culture and literature over time. Emphasizes the complex reflection of socio-political processes and realities in folk tales and literary fairy tales (*Kunstmärchen*), as well as the use of fairy tale motifs in other literary genres, film, the arts, and music, advertising, and everyday life. Topics to be discussed may include, but are not limited to, gender roles, family relationships, the motif of the quest, the depiction of heroes and heroines, the conflict between good and evil, crime and punishment, the idea of justice, altruism versus egotism, the fairy tale and politics, etc.

GRMN 481 - Special Topic

Class Hours: var

Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 481 are primarily for upper-level undergraduate students. Designed to meet the special needs of a student group.

GRMN 482 - Independent Study

Class Hours: var

Credits: 1-3

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

Provides an opportunity to engage in an in-depth analysis of some topic dealing with the German language and culture through consultation with a faculty member.

Honors Business

HBUS 101 - Contemporary Business Issues

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Admission to College of Business Honors Program

An honors-level course in the Eberly College of Business and Information Technology enables eligible students to participate in advanced study in the freshman year. Provides the foundation of the integrative nature of the college's majors by including seminar meetings discussing contemporary business issues with local, regional, and national alumni business leaders; research mentoring with college faculty and businesspeople; opportunities to provide service to the college, university, and the community; and the beginning of an electronic portfolio. Serves as the introduction to the college's honors program that also includes a sophomore cluster, an honors junior block, and an honors senior capstone course.

History

HIST 106 - Samurai and Gongfu Heroes: Masculinity in East Asia

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Explores what it means to be a man, from the haohan of China to the Men of High Purpose of Japan and beyond. Analyses stories, films, and official histories that have encouraged Chinese and Japanese people to emulate the great heroes of the past and how these people and their stories have been re-used in modern Asia. (Also offered as ASIA 106; may not be taken for duplicate credit.)

HIST 196 - Explorations in US History

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Interprets and analyzes the development of US history through a chronological survey of a historical era or a topical theme central to US history. Examines, where appropriate, the intersection of race and ethnicity, gender, and class. Emphasizes the recognition of historical patterns, the interconnectedness of historical events, and the incorporation of various subfields in the discipline of history. Successful completion of HIST 196 fulfills the Liberal Studies History requirement. HIST 197 and HIST 198 also fulfill this requirement, and any of these courses may be substituted for each other and may be used interchangeably for D/F repeats but may not be counted for duplicate credit.

HIST 197 - Explorations in European History

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Interprets and analyzes the development of European history through a chronological survey of a historical era or a topical theme central to European history. Examines, where appropriate, the intersection of race and ethnicity, gender, and class. Emphasizes the recognition of historical patterns, the interconnectedness of historical events, and the incorporation of various subfields in the discipline of history. Successful completion of 197 fulfills the Liberal Studies History requirement. HIST 196 and HIST 198 also fulfill this requirement, and any of these courses may be substituted for each other and may be used interchangeably for D/F repeats but may not be counted for duplicate credit.

HIST 198 - Explorations in Global History

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Interprets and analyzes the development of global history through a chronological survey of a historical era or a topical theme central to global history. Examines, where appropriate, the intersection of race and ethnicity, gender, and class. Emphasizes the recognition of historical patterns, the interconnectedness of historical events, and the incorporation of various subfields in the discipline of history. Successful completion of HIST 198 fulfills the Liberal Studies History requirement. HIST 196 and HIST 197 also fulfill this requirement, and any of these courses may be substituted for each other and may be used interchangeably for D/F repeats but may not be counted for duplicate credit.

HIST 201 - Western Civilization before 1600

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: 3cr of college history, or current major in any of the following: history, history/pre-law, middle-level education grades 4-8/social studies specialization, or secondary social studies
Examines the history of Western Civilization from its beginnings in the Ancient Near East to the Age of Discovery. Focuses on the major political, social, religious, and intellectual institutions in Western civilization to approximately 1600.

HIST 202 - Western Civilization since 1600

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: 3cr of college history, or current major in any of the following: history, history/pre-law, middle-level education grades 4-8/social studies specialization, or secondary social studies
Development of Western civilization from the expansion of Europe to the present, including political, diplomatic, economic, social, and cultural areas. Introduces issues and interpretations encountered in upper-level courses. For history majors or by instructor's permission.

HIST 204 - United States History to 1877

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: 3cr of college history, or current major in any of the following: history, history/pre-law, middle-level education grades 4-8/social studies specialization, or secondary social studies
An introduction to United States history from the Colonial period through Reconstruction, covering such main currents as the founding of American society, the American Revolution, the making of the Constitution, the market revolution, westward expansion, slavery, the Civil War, and Reconstruction.

HIST 205 - United States History since 1877

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: 3cr of college history, or current major in any of the following: history, history/pre-law, middle-level education grades 4-8/social studies specialization, or secondary social studies
An introduction to United States history, 1877 to the present, covering such main currents as industrialization, Progressivism, World War I, the Great Depression and New Deal, World War II and the Cold War, the 1960s, the Vietnam War, and post-Vietnam political, social, and economic developments.

HIST 206 - The History of East Asia

Class Hours: 3
Lab/Discussion: 0
Credits: 3

History of China and Japan from ancient times, Buddhism, medieval Japan, Chinese communism, industrialization, and the modern Pacific Rim. Some consideration of peripheral Asia.

HIST 207 - The History of the Middle East

Class Hours: 3
Lab/Discussion: 0
Credits: 3

History of the Middle East from the late Byzantine and Sassanid period, Islam, medieval Islamic civilization and the rise of early modern dynasties, European imperialism, the origins of modern nation states, and the contemporary Middle East.

HIST 215 - The Researcher as Detective

Class Hours: 1
Lab/Discussion: 0
Credits: 1

Introduces students to the uses of evidence in the construction of historical narrative and to the standard practices of the historian.

HIST 217 - Different Ways of Looking at the Past

Class Hours: 1
Lab/Discussion: 0
Credits: 1

Introduces different theoretical lenses that historians have used for viewing the past. Provides an overview of the different ways that our view of the past has changed over the course of the twentieth century.

HIST 218 - Right in Your Own Backyard: How to Do Local History

Class Hours: 1
Lab/Discussion: 0
Credits: 1

Introduction to historical methods and best research practices for conducting local history projects.

HIST 219 - Historians and the Public: Preserving and Presenting the Past

Class Hours: 1
Lab/Discussion: 0
Credits: 1

Examines the way historians serve as the intermediary between the public and their understanding of the past in a public setting. Explores how history is preserved and presented by historians, from historic sites and museums to virtual exhibits and documentary filmmaking.

HIST 220 - Visual Sources in History

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Examines cartoons, posters, comics and other visual media that have been used as forms of social criticism and propaganda throughout history and that are a valuable source of information for scholars and teachers. Locate and analyze these sources for use in research and teaching.

HIST 221 - The Historian's Craft

Class Hours: 1
Lab/Discussion: 0
Credits: 1

Prerequisite: BA History majors

Explores the various careers of historians and history-related fields.

HIST 230 - Queer Global History

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Analyzes the historical and global understanding of the concept of "queerness." Emphasizes the historical development of a queer identity and the modern creation of a queer community, focusing on comparing different modern notions of queerness and the LGBTQ+ struggle for equal rights.

HIST 231 - History of Jerusalem

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Explores the history of the city of Jerusalem from the ancient world until the present, examining the significance of the city to contemporary conflicts in the Middle East.

HIST 232 - Stalin and Hitler and the Terror State

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Explores the historical understanding of Joseph Stalin and Adolph Hitler and the totalitarian states that they created. Emphasizes their influence on domestic and international events from the 1920s through the 1950s.

HIST 240 - Zombies: A Cultural History of Death, Disease, and Technology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Explores the concept of the Zombie throughout history and across cultures, and the way the figure of the Zombie has served as a metaphor for deeper personal and communal fears, such as death, nuclear war, global pandemics, and out of control technology.

HIST 251 - United States Military History

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Not applicable toward the history major

A survey of the history and transformation of the American military from the Colonial period to the present time. American military history is analyzed within the context of the nation's political, social, economic, and cultural development. Central themes include war making, civil-military relations, and military professionalism.

HIST 265 - The History of Power: Its Uses and Abuses

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Explores the many forms that power has taken in the past, from the soft power of persuasion to the hard power of law and government. Focuses on Western Europe and the United States, from the Renaissance to the mid-twentieth century, and on issues of political control, race, and gender.

HIST 295 - Introduction to Historical Studies

Class Hours: 2

Lab/Discussion: 0

Credits: 2

Prerequisite: History, history/pre-law, or social studies education majors

First of a two-course sequence. Introduces students to the study of history, analysis of primary and secondary sources, historical interpretation and historical writing. The student is encouraged to become a better critical thinker and historian.

HIST 302 - History of Ancient Rome

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

Traces Roman history from early Republic down to fall of Empire. Roman political theory is particularly emphasized.

HIST 303 - Medieval Europe I, 400-1000

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

History of early Medieval Europe, from decline of Rome to beginnings of High Middle Ages; emphasis on political, social, economic, religious, and intellectual developments.

HIST 304 - Medieval Europe II, 1000-1300

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

History of late Medieval Europe, from High Middle Ages to Renaissance period; emphasis on political, social, economic, religious, and intellectual developments.

HIST 305 - Renaissance and Reformation

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

History of Europe from approximately 1250; rise of commercial city, kings, and pressures on Christian Church to 1600. Some consideration of technology and voyages.

HIST 306 - Early Modern Europe

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Sophomore standing, 3cr of college history
Greatness of France under Louis XIV; Sweden; Thirty Years' War. Emergence of modern society; French Revolution.

HIST 307 - History of Europe: 1815-1914

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Sophomore standing, 3cr of college history
The study of Europe in 19th century, with emphasis on the emergence of major thought patterns, Romanticism, Nationalism, Socialism, and Positivism.

HIST 311 - Rise and Fall of Hitler's Empire

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Sophomore standing, 3cr of college history
An in-depth study of Hitler and the Nazi order; offers an analysis of 19th-century origins of Nazi ideology and intensively analyzes domestic and foreign totalitarian policy (1920-1945), including Holocaust, Resistance, and the postwar Nuremberg Trials.

HIST 312 - Europe, 1914-1945: The Age of Dictators and Imperiled Democracies

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Sophomore standing, 3cr of college history
Surveys the principal themes in the transformation of Europe from 1914 to 1945. Topics include World War I and the Paris Peace settlement; developments in conservatism, liberalism, and socialism; colonial empires; the emergence of communism, fascism, and Nazism; artistic, musical, and literary movements between the two World Wars; the Great Depression and responses to it; anti-Semitism and the Shoah; the Spanish Civil War, appeasement, and World War II; and the seeds of decolonization and the Cold War.

HIST 313 - Europe Since 1945: Division, Revolution, and Unity

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Sophomore standing, 3cr of college history
Surveys the principal themes in European history since 1945. Topics include postwar reconstruction, the origins of the Cold War in Europe, the long years of economic growth followed by stagnation, decolonization of the British and French empires, the events of 1968 and their consequences, the experience of communism in the East Bloc, the revolutions of 1989, and progress toward European integration.

HIST 320 - History of England to 1688

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

A survey of the growth of the English nation, with emphasis on political, social, and economic developments leading to 17th-century conflict between Crown and Parliament.

HIST 322 - French Revolution and Napoleon

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

Brief sketch of Old Regime, concentration on Revolution and Empire, with emphasis on politics, social structure, diplomacy, and economics.

HIST 323 - France, 1815 to the Present

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

A survey of French history from the end of the Napoleonic era to the present. Pays special attention to the revolutionary tradition in politics, changes in the lives of workers and peasants, the French experience in the two world wars, and recent social and political trends.

HIST 326 - History of Russia

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

A general survey of Russian history, culture, and institutions. Special consideration given to the study of historical forces formative of Revolution of 1917.

HIST 327 - Soviet Union and Contemporary Russia

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

Analyzes the period from 1855 to the present, including the attempts at modernization by Imperial Russia, the creation of the Soviet Union and further modernization, and the collapse of the Soviet Union.

HIST 331 - Modern Middle East

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Sophomore standing and 3cr of college history

A survey of changes that have taken place in Middle East and in Islam since 18th century and of contemporary problems in that region.

HIST 332 - History of Early China

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Sophomore standing and 3cr of college history

China from the dawn of time to the Tang Dynasty. Focuses on the creation of the intellectual and political systems that have dominated China and East Asia down to the present. Looks in depth at the origins of Chinese philosophy and the imperial system.

HIST 338 - The History of Iran

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

Focuses on aspects of Iranian history from the Achaemenid period until the present that are significant for the formation of modern Iranian identity. Uses primary sources, secondary readings, literature, and film to analyze the development of Iranian identity as well as modern perceptions of Iran. Emphasis on ancient Iranian culture and religion, the story of Iranian wars with the Greeks and Romans, how Iran became Muslim, and the development of contemporary Iranian religion and politics.

HIST 339 - Jihad and the Origins of Islamist Movements in the Middle East

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

Discusses the concept of "jihad" in Islamic history: its origins, development, and historical deployment by groups within the Muslim community. Analyzes the history and origins of groups such as al-Qaeda, the Taliban, and ISIS and considers whether these groups are "medieval" or actually modern products of globalization. (Also offered as PLSC 339; may not be taken for duplicate credit.)

HIST 341 - American Revolution

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

An examination of Whig-Tory participants of American Revolution. Examines events from 1763 to 1783. Changing interpretations of the causes and effects of the revolution are discussed.

HIST 342 - The Early Republic

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

A survey of United States history from 1783 to 1850, with special attention on constitutional, political, economic, and social trends.

HIST 343 - Civil War and Reconstruction

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

The study of the failure of American democracy to cope with issues of mid- 19th century, followed by political, economic, military, and social developments during war and reconciliation of North and South.

HIST 346 - Recent United States History

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

Examines the major political, economic, social, and cultural changes in America since 1945, with a focus on their causes, character, and significance; also explores the role of the United States in global relations.

HIST 348 - Top Secret America: The Rise and Reach of the National Security State

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Focuses on the historical development of the concept of national security in the US and on the intersection of national and broader international security concerns in the Cold War context. Identifies, for the Cold War era and beyond, diplomatic, military, and intelligence capabilities of governments and explores how individuals and groups conceptualized themselves, and their security. Explores one powerful motivator: fear and how it translated into political actions and citizen involvement in Cold War concepts. HIST 348 and PLSC 348 may be substituted interchangeably for D/F repeats, but may not be used for duplicate credit.

HIST 350 - History of Latin America: Colonial Period, 1450-1820

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

A study of life of people, Indian cultures, conquest by Spaniards and Portuguese, government during Colonial Period, and Wars of Independence.

HIST 351 - History of Latin America: National Period, 1820-Present

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

A study of the history of nations that have emerged since independence; emphasis on economic, political, cultural, and social developments of these nations, as well as relationships of these nations to others in the hemisphere.

HIST 360 - History of Pennsylvania

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Emphasizes the cultural, economic, political, and social development of Pennsylvania in its various periods from Colonial time to today. Special attention is given to the diversity of Pennsylvania's people, their institutions, and their problems.

HIST 362 - History of American Diplomacy, 1900-present

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

Treats primarily our 21st-century involvement in world affairs and domestic debate over that involvement. Special emphasis is on the role of interest groups and increasing power of Executive Department over foreign affairs.

HIST 363 - Thought and Culture in Early America

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

Selected topics in early American intellectual and cultural growth, with emphasis on Puritanism, Enlightenment, cultural nationalism, and Romantic movement.

HIST 365 - History of Black America since Emancipation

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

Description and analysis of the role of blacks in the history of the United States since the Civil War; emphasis on key leaders, major organizations, leading movements, and crucial ideologies of blacks in modern America.

HIST 369 - Women in America

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

A study of the activities of women from the colonial era to the modern era—evaluating cultural, societal, religious, economic, and political frameworks. Reviews women's involvement in movements for feminism, social reform, unionism, and the abolition of slavery.

HIST 374 - History of Organized Crime

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

Studies the relationship between urban, entrepreneurial crime and the evolution of industrial America.

HIST 379 - History in the Digital Age

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: History and social studies education/history majors; not applicable toward Social Studies Education requirements; sophomore standing; 3cr of college history

Examines the changes that digital technologies are bringing to the field of history and how historians research, write, present, and teach the past. Students investigate the development of this new media and study the state of digital historical work by scholars, teachers, archivists, museum curators, and popular historians. As they examine this work, students also explore the philosophical and ethical issues raised by efforts to put history online. Finally, students are given an introduction to some of the programs used by historians and the public to create digital history.

HIST 385 - People in Nature: An Introduction to Environmental History

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

Examines the ways in which human perceptions of nature, human manipulations of nature, and natural constraints on human activities have interacted and changed over time. Drawing material from early modern and modern Europe as well as the United States, this course treats the effects of climate change, industrialization, agricultural crisis, deforestation, and modern conservation and environmentalism through rotating case studies. Examines the following comprehensive questions with each case study: How have climate, soil, biota, and other natural factors shaped human ways of making a living from the land? How have they influenced culture more generally? How has human action, in various times and places, modified natural ecosystems? How do we describe the resulting "hybrid" landscapes? How have different cultures described and analyzed nature?

HIST 391 - Film as History

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

Particularly concerned with probing the relationship between cinema and society. History of film is explored, and student is given some background in film interpretation and cinematography, the western, science fiction, police films, and great foreign and American detective films.

HIST 395 - Introduction to Historical Methods

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: HIST 295

A colloquium focusing on historiography and historical methods in the context of a specific topic. Students are expected to improve their research and writing skills and their understanding of historiography and methods of historical research. (writing-intensive course)

HIST 420 - Introduction to Public History

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

Introduces students to a wide range of activities in which public historians engage. Considers broader conceptual theoretical and practical issues associated with historic preservation, museum studies, oral history, the management of archival and manuscript collections, as well as a variety of other public history activities. Also considers broader conceptual issues associated with the field of public history. None of the Public History courses (HIST 420, HIST 421, HIST 422, or HIST 423) may be counted towards the BSEd—Social Studies Education/History Track. Only one may be counted towards the BA—History or the BA—History/Pre-law Track.

HIST 421 - Archival Studies

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

An introduction to the archival profession and its practices. None of the Public History courses (HIST 420, 421, HIST 422, or HIST 423) may be counted towards the BSEd—Social Studies Education/History Track. Only one may be counted towards the BA—History or the BA—History/Pre-law Track.

HIST 422 - History Museums and Historic Sites: Theory and Practice

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

An introduction to the history of museums and historic sites. Focuses on the relationship between history and public audiences, on the theory and practice of telling stories through museums, historic sites, and living history. Introduces the tools that public historians use to interpret the past, explores key dilemmas in public interpretation and community collaboration, and examines contemporary models on how to reach audiences in ways that make history resonant and meaningful to them. None of the Public History courses (HIST 420, HIST 421, 422, or HIST 423) may be counted towards the BSEd—Social Studies Education/History Track. Only one may be counted towards the BA—History or the BA—History/Pre-law Track.

HIST 423 - Oral History Practice

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

Introduces the practices of collecting and preserving oral histories, as well as the research and public use of oral histories. None of the Public History courses (HIST 420, HIST 421, HIST 422, or 423) may be counted towards the BSEd—Social Studies Education/History Track. Only one may be counted towards the BA—History or the BA—History/Pre-law Track.

HIST 433 - China 1300-1800: The Late Imperial Age

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

Examines the cultural and social history of Late Imperial China. Includes elite attempts at creating an orderly Confucian society and also how less powerful groups altered or challenged this vision. Discusses the role of commercialization and commercial culture and China as an Early Modern society. (Titled *Bandits and Poets: The Cultural and Social History of Late Imperial China before 2016-17.*)

HIST 434 - Modern China 1800-present

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

China's modern transformation from the crisis of the Late Qing through the various revolutionary governments of the 20th century to the rise of China as a world power. Looks at both Chinese elites' quest for wealth and power and the impact this quest has had on ordinary people. (Titled *History of Modern China: From the Opium Wars to the Present before 2016-17.*)

HIST 436 - Japan 1500-1850: Early Modern Japan

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

Examines the cultural and social history of Early Modern Japan, including both Sengoku and the Tokugawa. This includes elite attempts at creating a stratified social order and also how less powerful groups altered or challenged this vision. Discusses the role of commercialization and commercial culture and Japan as an Early Modern society. (Titled *Geisha and Samurai: The Cultural and Social History of Early Modern Japan before 2016-17.*)

HIST 437 - Modern Japan 1850-Present

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

Japan's modern transformation from the age of the samurai to the present. Looks at both the Japanese elites' quest for wealth and power in the late 19th and the 20th centuries and the impact this quest has had on ordinary people. (Titled *The History of Modern Japan: From the Floating World to the Present before 2016-17.*)

HIST 475 - History of American Constitutionalism

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Sophomore standing and 3cr college history

Examines the major themes and problems concerning the constitutional history of the United States from the American Revolution to the end of the Cold War. Among other subjects, explores why and how the United States Constitution was written; how the nature and scope of the powers of Congress, presidency, and judiciary were transformed; how the relationship between the federal government and the states evolved; and how such constitutional amendments as the first and 14th redefined the power of governments, as well as the rights of citizens.

HIST 481 - Special Studies in History

Class Hours: var

Credits: 1-3

Prerequisite: As appropriate to course content, sophomore standing, 3cr of college history

Offered each semester in interest areas that are not part of the regular program. Some examples of courses of this type are the Victorian Age, the History of Love, World War II, the Great Depression, the Adams Chronicles, and the History of New York City. May schedule as many of these courses as desired, but two per semester is the usual limit.

HIST 482 - Independent Study

Class Hours: var

Credits: 3-6

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost with 12cr in history; a 3.0 GPA in history classes; permission of a faculty member. Approval is based on academic appropriateness and availability of resources. Involves directed reading or research for qualified students. Experimental projects and personalized learning are encouraged.

HIST 483 - Honors Thesis

Class Hours: var
Credits: 3-6

Prerequisite: History, history/pre-law, or social studies education/history major; 3.25 cumulative GPA; 3.5 GPA in history courses, departmental permission. Approval is based on academic appropriateness and availability of resources.

A two-semester sequence of research and writing, culminating in an honors thesis. Honors theses are completed individually under the direction of a department professor who specializes in the student's area of interest and are approved by a thesis committee comprising the director and two others, one of whom may come from outside the History Department. Completion of 6cr of HIST 483 substitutes for HIST 480 . May be taken twice for a total of 6cr.

HIST 493 - Internship

Class Hours: var
Credits: 3-12

With departmental approval, students are attached to local or national government or private agencies doing directive, bibliographical, archival, or museum work. Advising professor meets with intern regularly and determines what papers or reports are required.

HIST 495 - Topics in United States History

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: HIST 395 and junior/senior history, history/pre-law, or social studies education majors or by instructor permission

An upper-division course emphasizing lecture, reading, discussion, and writing on specialized topics relating to historical issues of the United States of America. The theme varies from semester to semester according to the expertise of the faculty member teaching the course. May be repeated. (Offered as HIST 401 before 2014-2015.)

HIST 496 - Topics in European History

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: HIST 395 and junior/senior history, history/pre-law, or social studies education majors or by instructor permission

An upper-division course emphasizing lecture, reading, discussion, and writing on specialized topics relating to European historical issues. The theme varies from semester to semester according to the expertise of the faculty member teaching the course. May be repeated. (Offered as HIST 402 before 2014-15.)

HIST 497 - Topics in Non-Western History

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: HIST 395 and junior/senior history, history/pre-law, or social studies education majors or by instructor permission

An upper-division course emphasizing lecture, reading, discussion, and writing on specialized topics relating to non-Western historical issues. The theme varies from semester to semester according to the expertise of the faculty member teaching the course. May be repeated (Offered as HIST 403 before 2014-15.)

HIST 498 - Topics in Comparative History

Class Hours: 3
Lab/Discussion: 0

Credits: 3

Prerequisite: HIST 395 and junior/senior history, history/pre-law, or social studies education majors or by instructor permission

An upper-division course emphasizing lecture, reading, discussion, and writing on specialized topics relating to comparative historical issues. The theme varies from semester to semester according to the expertise of the faculty member teaching the course. May be repeated. (Offered as HIST 404 before 2014-15.)

HIST 499 - Topics in Public History

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: HIST 420

Capstone for students in the public history concentration. Draws on program experience to conduct a major public history project, short research paper, and professional portfolio.

Honors College

HNRC 101 - Honors Core I

Class Hours: 5

Lab/Discussion: 0

Credits: 5

Prerequisite: Freshman status, admission to the Honors College

This first in a series of three required and interrelated courses introduces Honors College students to major works of literature and art; to major ideas in history, philosophy, religious studies, literature, and the fine arts; and to critical thinking skills used in reading, writing, and discussion in an integrated, synthetic, and interactive pedagogical environment. While materials from various periods and disciplines are part of HNRC 101, each instructor has attempted to incorporate some works from a common century to provide students with a common ground for exploring the core questions.

HNRC 102 - Honors Core II

Class Hours: 5

Lab/Discussion: 0

Credits: 5

Prerequisite: HNRC 101, freshman status, admission to the Honors College

The second in a series of three required and interrelated courses. Continues the emphases of HNRC 101: (a) introduction to major works of literature and fine arts; (b) introduction to major ideas in history, philosophy, religious studies; and (c) focus on critical thinking skills used in reading, writing, and discussion in an interrelated, synthetic, and interactive pedagogical environment. Although materials come from various periods and disciplines, each instructor has incorporated works from a common century to provide a common ground for exploring core questions. Building on their experiences in HNRC 101, students become more critical and analytical in their reading and response. Further, the ability to synthesize is emphasized based on their previous readings and learning experiences.

HNRC 201 - Honors Core III

Class Hours: 4

Lab/Discussion: 0

Credits: 4

Prerequisite: Sophomore status, admission to the Honors College, and successful completion of HNRC 101 and HNRC 102 if admitted to the Honors College as a first-year student. Prerequisites for students admitted to the Honors College as sophomores are ENGL 101 and at least one Liberal Studies course in the humanities or fine arts.

Completes the introduction of Honors College students to major works of literature and art; major ideas in history, philosophy, religious studies, literature, and the fine arts; and critical thinking skills used in reading, writing, and discussion in an integrated and interactive pedagogical environment.

HNRC 202 - Honors Core: Sciences

Class Hours: 4

Lab/Discussion: 0

Credits: 4

Prerequisite: HNRC 101, HNRC 102, sophomore status, admission to the Honors College

Concerned with science as a way of knowing about the world. Focuses on what scientists have learned about what it means to be human, how humans have been shaped by and, in turn, have influenced their environment, and what use might be made of scientific knowledge. These themes are explored from disciplines in the natural and social sciences.

HNRC 499 - Honors Senior Synthesis

Class Hours: var

Credits: 3-6

Prerequisite: 3.25 GPA, Honors College good standing or instructor permission, 73 or more credits earned

Concluding cross-disciplinary Honors College experience, focused on the question "what are the obligations of the educated citizen?" Helps students understand and handle complex intellectual issues from multiple perspectives. A selection of topics is announced and described in the undergraduate course schedule. Substitutes for LBST 499.

Hospitality Management

HOSP 101 - Introduction to the Hospitality Industry

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Examines the development and current status of the hospitality industry. Profiles major hotel, restaurant, and related area employers. Discusses career opportunities. Features guest speakers from various hospitality industry segments.

HOSP 130 - Food Service Sanitation

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Introduces concepts and issues pertaining to sanitation and security management in the food service segment of the hospitality industry. Examines causes and prevention of food-borne illness, Hazard Analysis Critical Control Point (HACCP) food production methods, and current government regulations. (Titled Hospitality Sanitation and Security before 2015-16.)

HOSP 150 - Principles of Hospitality Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces classic management theory and responsibilities, with an emphasis on hospitality industry applications.

HOSP 212 - Club Operations Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Provides an in-depth understanding of the unique aspects of private club management. The differences as compared to public golf courses, public restaurants, hotel operations, equity (member-owned), and non-equity (corporate-owned) club settings are explored.

HOSP 220 - Food Service Operations

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces the operational concepts of food service operations in commercial kitchen facilities. Includes planning, preparation, and service of quantity food production. Emphasizes the integration of sanitation, menu planning, cost controls, and application of computer software.

HOSP 235 - Tourism Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces concepts pertaining to international and domestic tourism. Examines the economic, social, and cultural aspects of tourism, as well as how destinations are marketed. (Offered as HOSP 115 before 2017-18.)

HOSP 245 - Multicultural Management in Hospitality

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Sophomore standing

Examines the effects of international migration and changing roles of minorities within the global and domestic hospitality industry. Addresses the cultural factors affecting workplace productivity and relationships.

HOSP 250 - Resort Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Identifies characteristics of hospitality industry resort operations. Includes resort history, resort planning and development, food and beverage operations, lodging operations, recreational activities, and other relevant operational characteristics.

HOSP 256 - Human Resources in the Hospitality Industry

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 101

Examines human resource management in the hospitality industry. Topics include cultural diversity, legal requirements, job analysis, recruitment and selection, training and development, performance appraisal, compensation, and benefits administration.

HOSP 259 - Hospitality Purchasing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Includes sources, standards, grades, methods of purchase, and storage of various foods, beverages, and fixtures. Emphasizes the development of purchasing policies and specifications.

HOSP 260 - Hotel Operations Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Examines the development and classification of lodging operations. Hotel operating departments, department personnel, operational procedures, and current lodging trends and companies are discussed.

HOSP 265 - Hospitality Cost Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Identifies and analyzes the control of hospitality operation costs, including those in the areas of food, beverage, labor, and material, and compares those costs to industry norms. Students analyze income statements and balance sheets.

HOSP 280 - Special Event Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces the principles of special event management and current practices and developments within the event-management industry. Discusses event management responsibilities from the initial planning stages through delivery.

HOSP 281 - Special Topics

Class Hours: var

Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 281 are offered primarily for lower-level undergraduate students.

HOSP 285 - Service, Menu Planning, and Facilities Design

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Focuses on food and beverage service characteristics, menu planning and design, and facilities design within various operational concepts in the hospitality industry.

HOSP 299 - Cooperative Education (First Experience)

Credits: 0

Prerequisite: Completion of 30cr, 2.0 GPA

A semester-long program that combines classroom theory with practical application through job-related experiences. Student required to complete two alternating experiences; only one may be a summer experience.

HOSP 300 - Critiquing Commercial Restaurants

Class Hours: 1

Lab/Discussion: 0

Credits: 1

A opportunity for the student of hospitality management to evaluate operational characteristics of commercial restaurants from the perspective of a dining patron. Students, as members of dining teams, dine in a variety of restaurant concepts and evaluate the business operation on a battery of performance criteria, including site appearance, menu diversity, service competence, product quality, and sanitation. Students incur out-of-pocket dining expenses.

HOSP 310 - Professional Development in the Hospitality Industry

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: HOSP 150

An opportunity to identify and design industry-specific job search strategies, techniques, and skills including résumé and cover letter writing, interviewing, portfolio development, and strategies to attain career success within the hospitality industry.

HOSP 320 - Hospitality Marketing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Students gain an understanding of the principles and concepts of marketing as they apply to hospitality management. Analyzes consumer behavior related to the hospitality industry. Students learn to make effective marketing decisions as they apply to customer satisfaction.

HOSP 325 - Hotel Sales

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: HOSP 260

Identifies the functions and activities of the sales department within a hotel property. Provides a thorough review of the organizational structure of a typical hotel sales department and the documentation used. Covers identification and approaches to securing typical hotel market segments.

HOSP 326 - Theme Park and Attraction Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: HOSP 235

Provides a comprehensive view and an in-depth understanding about the various operational areas and managerial issues in theme parks and attractions.

HOSP 330 - Applications of Food Production and Service

Class Hours: 0

Lab/Discussion: 10

Credits: 4

Prerequisite: HOSP 220, or FDNT 150/FDNT 151, and Proof of ServSafe

Training for the hospitality management student in advanced fundamentals of technique, timing, and management skills through laboratory experiences, as well as the operation of the Allenwood Restaurant facility.

HOSP 335 - Legal Issues in Hospitality

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: HOSP 256

Examines the concepts and issues pertaining to hotel and restaurant law, government regulations, and their impact on the hospitality industry. A special emphasis is on innkeeper-guest relationship, employee relations, food laws and liability, liquor law and liability, and guest rights.

HOSP 341 - Professional Wedding Planning and Consulting

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: HOSP 280

Focuses on the application of hospitality management practices to the planning and implementation of successful wedding events. Emphasizes: an analysis of the factors involved in the social, political, economic, cultural, religious and historical influences on wedding planning decision-making and business strategies, negotiation of contracts, selection of vendors, and preparation of comprehensive wedding event proposals. The unique application to the wedding planning and consultation in the hospitality industry.

HOSP 343 - Fund-Raising for Special Events

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: HOSP 280

Relevant management tools, techniques, and strategies used for acquiring event revenue through fundraising and special event management are explored. Evolving legislation affecting sponsor and donor relationships is examined. The contemporary concept of sponsorship is benchmarked against a historical review to frame an understanding of how sponsor and organizational needs change.

HOSP 346 - Catering for Special Events

Class Hours: 3

Lab/Discussion: 0

Credits: 3

A practical understanding of the management tasks of a caterer and his/her relationship to the special events industry.

HOSP 347 - Meeting and Convention Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: HOSP 280

Analyzes the management and economic impact of the convention, meeting, and exposition industry. Examines the development of strategies used to manage conferences, meetings and trade shows to include the methodologies unique to each property and group served.

HOSP 350 - Introduction to the Casino Industry

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Examines the global casino industry from a historical perspective and includes legal, social, and economic issues. Also reviews the various games played in casinos, current trends, and popular global casino destinations.

HOSP 352 - Destination Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: HOSP 235

Provides an overview of the key challenges and constraints facing convention and visitors bureaus and how destination management can be planned, implemented and evaluated to achieve successful destination competitiveness.

HOSP 358 - Restaurant Equipment and Design

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Examines types and uses of food service production and service equipment with emphasis on incorporation into an effective facilities design. Field trips permit investigation of a variety of unit designs.

HOSP 367 - Festival Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: HOSP 280

Examines the international, regional, and local perspective of festivals and festival-event management. Examines and evaluates management, marketing, financial, and operational considerations together with strategies necessary to ensure viable festivals. (Offered as HOSP 275 before 2017-18.)

HOSP 372 - Housekeeping and Facilities Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: HOSP 260

Provides an overview of hotel housekeeping and facilities management. Special attention placed on proper staffing and scheduling techniques, housekeeping cost control, facilities management tools and techniques, sustainability management, and facility design.

HOSP 382 - International Tourism

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: HOSP 235

Examines the current status of hospitality and tourism industries at the global level. Analyzes different cultures, geographical features, and social, economic, and environmental issues in different countries to develop a comprehensive travel plan that meets the needs of today's international tourist.

HOSP 393 - Exploratory Hospitality Field Experience

Class Hours: var

Credits: 3-12

Prerequisite: HOSP 310, 2.0 overall GPA, 45 earned credits in A.S. or 60 earned credits in B.S., and 12 earned HOSP credits

Provides practical experience in the hospitality industry with approved internship sites. Students should select a segment of the hospitality industry relating to their interested concentration area to obtain experience.

HOSP 400 - Hotel Revenue Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: HOSP 260

Provides an overview of organizational decision making in reference to hotel revenue management. Examines evolving trends of revenue management, best approaches to building profitable pricing strategies, and data analytics.

HOSP 402 - Beverage Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Verifiable proof of 21 years of age or permission

Examines the principles, processes, and theories of beverage service. Analysis of methods of alcoholic beverage production and examination of categories of spirits, malt beverages, and wine, as well as legal concerns of service. Development and marketing of beverage operations are discussed. Includes voluntary tasting and evaluation of alcoholic beverage products.

HOSP 403 - Wine and Wine Service

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: All students must be 21 years of age or older

A study of the wine-growing regions, production, processing, and distribution of domestic and international wines. Topics include types of wine grapes, varieties of wine, proper storage procedures, the techniques of proper wine service, and responsible alcohol service.

HOSP 404 - Brew Pub and Brewery Operations

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Verifiable proof of 21 years of age or older

Addresses the art of brewing beer, beer styles, brewing equipment requirements, responsible alcohol service, beer and food pairing, sales, and marketing. Students visit local breweries and brew pubs. Students are required to attend three daylong field trips.

HOSP 408 - Hospitality Strategic Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Examines characteristics of managing human resources, capital, materials, equipment, products, and markets as they pertain to hospitality contract operations. (Titled Institutions Management before 2015-16.)

HOSP 411 - Contemporary Issues in Hospitality

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 101

Discussion of contemporary issues within the hospitality industry. Students write a series of opinion/reaction papers to presented discussion topics.

HOSP 413 - Restaurant Food Production and Service

Class Hours: 0

Lab/Discussion: 10

Credits: 4

Prerequisite: HOSP 330

Emphasizes restaurant front and back-of-the house operations management. Examines researching, planning, preparing and present theme-oriented meal showcasing selected domestic and international cuisine in the Allenwood Restaurant. Focuses on operations of employees and managers within the department's food and beverage operation.

HOSP 433 - Educational Study Tour

Class Hours: var

Credits: 2-6

A comprehensive program of directed activities permits firsthand experiences in the historical and cultural aspects of the hospitality industry worldwide. Visits to renowned operations are included in the tour.

HOSP 450 - Training, Development, and Supervision in Hospitality Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Instructor permission

Applied course in which students identify effective practices and examine current issues related to training and development within the hospitality industry.

HOSP 460 - Labor and Employee Relations in the Hospitality Industry

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Instructor permission

Explores the history of the labor movement and the development of employee relations in the hospitality industry examining the major industry segments including lodging, restaurants, casinos, clubs, and related businesses. Students engage in a research project with the intention of presentation and/or publication submission

HOSP 470 - Hospitality Business Model

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Senior status and instructor permission

Provides the opportunity to integrate and apply hospitality operations management concepts into the development of a working hospitality business model.

HOSP 481 - Special Topics

Class Hours: var
Credits: 3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 481 are primarily for upper-level undergraduate students.

HOSP 482 - Independent Study in Hospitality Management

Class Hours: var
Credits: 1-6

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

Students with interest in independent study of a topic not offered in the curriculum may propose a plan of study in conjunction with a faculty member. Must apply a semester in advance and have 60cr earned. Approval is based on academic appropriateness and availability of resources.

HOSP 494 - Internship

Class Hours: var
Credits: 3-12

Prerequisite: HOSP 310, senior status, 2.0 overall GPA

Provides practical experience in the hospitality industry with approved internship sites. May be scheduled only after consultation with the department internship coordinator. Requirements include rotating through appropriate industry departments, specific to their career interests that give students a broad view of the various management systems in the organization and the completion of the final portfolio. See internship coordinator for more information. Kitchen food production uniforms are required for all lab courses in which food is prepared. Students must meet the professional dress requirements of the department.

Information Management

IFMG 101 - Computer Literacy

Class Hours: 3
Lab/Discussion: 0

Credits: 3

An introductory course providing a fundamental understanding of computers. Familiarizes students with the interaction of computer hardware and software. Emphasizes the application of microcomputers, the use of productivity software (word processing, spreadsheet management, file and database management, presentation graphics, web browsers, search strategies, and e-mail), and the social and ethical aspects of the impact of computers on society. (Does not count toward computer science major.) Any of these courses may be substituted for each other and may be used interchangeably for D/F repeats but may not be counted for duplicate credit. Note: cross-listed as BTED/COSC 101.

IFMG 110 - Business Spreadsheet Computing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces the fundamentals of the use of spreadsheet technology in the business environment. Familiarizes the students to the different formats and setups for business data. Illustrates various uses of spreadsheet formulas and functions in the business environment. Explains the application of charts and graphs for data analysis and also for collecting and sharing data. Demonstrates the use of spreadsheet tools in the analysis of research data.

IFMG 210 - Introduction to Front-End Business Applications

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: IFMG 101/COSC 101 or IFMG 110

An introduction to systems and development concepts, information technology, and front-end business application software. Explains how information is used in organizations and how MIS enables improvement in quality, timeliness, and competitive advantage. Students learn how to design and construct a front-end business application using a programming language.

IFMG 230 - Introduction to Back-End Business Applications

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: IFMG 101/COSC 101 or IFMG 110

Introduces the back-end business programming language as it applies to business organizations and their applications. Structured back-end business concepts and methods are taught as the student learns how to solve business problems using computers. Involves using files, reports, and tables to produce a variety of outputs utilized in operating and managing business activities.

IFMG 250 - Business Systems Technology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: BTED/COSC 101/IFMG 101 or COSC 110

Presents a functional review of computing equipment and the organization of components and devices into architectural configurations. Also teaches the principles of system software and builds an understanding of combinations of hardware and software within architectural designs.

IFMG 254 - Computer Technology Virtualization

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: IFMG 250

Introduces virtualization technology in the computing environment through the study of various related tools. Highlights key issues related to creating and using the virtual environment infrastructure. Presents alternatives for incorporating virtualization solutions at organizations. Uses technological case studies and practical applications. Prepares students to propose virtualization solutions for enterprise computing environments.

IFMG 300 - Information Systems: Theory and Practice

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: IFMG 101/COSC 101, or IFMG 110

Includes basic MIS concepts, fundamentals, and practices. Broad areas of coverage are principles, the computer as a problem-solving tool, computer-based information systems (CBIS), organizational information systems, and information systems management.

IFMG 352 - LAN Design and Installation

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: BTST 273 or IFMG 250 or any computer science course numbered 300 or higher

A study of fundamental local area networking concepts. A detailed study of the basics of local area network (LAN) technology. A comparative study of commercially available LAN systems and products. Features a hands-on laboratory implementation of a LAN. Either course may be substituted for the other for D/F repeats but may not be taken for duplicate credit. Cross-listed as COSC 352 .

IFMG 360 - Information Storage and Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: IFMG 352

Provides the knowledge for understanding the storage infrastructure required to store this information in personal, enterprise, and cloud computing settings. Focuses on the different components of storage infrastructure and how to successfully manage it. Examines basic and advanced concepts of storage technology to enable evaluation and design of storage architectures with features to meet a variety of technical and business needs. Considers disaster recovery and business continuity solutions such as backups, replication, and archiving which is related to the broader field of information assurance.

IFMG 390 - Database Theory and Practice

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: IFMG 210 or IFMG 230 or COSC 220

Reviews database design, data model methodologies, physical data structure, and database development and implementation. Introduces the remote data service, transaction server, and database administration. Emphasizes the practical approach in accessing the database using Internet technology.

IFMG 414 - Internet of Things

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: IFMG 352 and IFMG 210 or IFMG 230

Introduces the world of the Internet of Things (IoT) including conceptual foundations and practical applications. Presents the theoretical concepts and the hands-on knowledge on creating and managing IoT applications through assigned readings, prototyping, simulation, and mock-up exercises. Classifies business models applicable to IoT. Examines the ethical standards pertinent to the field of IoT.

IFMG 455 - Business Data Mining

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: IFMG 390

Introduces the strategies, technologies, and techniques associated with this growing MIS specialty area. Consists of three main parts: (1) the basic methodology for designing, using, and managing a data warehouse, (2) integrating different sources of data using non-relational technologies, and (3) using different data mining techniques to derive information from data for strategic and long-term business decision-making. (Titled Data Warehousing and Mining before 2016-17.)

IFMG 456 - Business Intelligence, Informatics, and Big Data Analysis

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: QBUS 215, instructor permission (determination of appropriate background done by the instructor)

Primarily concerned with business analysis dealing with quantitative approaches, including those involving big data, for decision making for Business Intelligence and Informatics (BII). Big Data (BD) is the term for a collection of data sets that are so large and complex that it becomes difficult to process this data by using on-hand database management tools or traditional data processing applications alone.

IFMG 460 - Analysis and Logical Design

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: (IFMG 210 or IFMG 230) and IFMG 352, IFMG 390

Involves teaching the tools and techniques required for the analysis and design of a business system. Along with in-class discussions of the principles and techniques for analyzing, designing, and constructing the system, the students also formulate system teams in order to analyze the problems of an existing business information system, to design an improved system, and to control the implementation of the new system.

IFMG 468 - Information Technology (IT) Security

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: IFMG 352

Introduces the principles and practices of security in the information technology (IT) field of study. Covers topics widely discussed in the IT security field to include security governance, strategic planning, policies and procedures, infrastructure, security management models, contingency plans and other related topics. Elaborates on the legal and ethical issues facing IT security in practice.

IFMG 471 - Data Center and Cloud Computing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: IFMG 254, IFMG 360

Introduces the building and managing of data centers as a cloud on the network. Focuses on the fundamentals regarding data center system configuration, networking, storage, and application. Examines different kinds of cloud service and delivery models. Discusses the management of data center security.

IFMG 475 - Project Management and Implementation

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: IFMG 460

Introduces the demands made on the project manager and the nature of the manager's interaction with the rest of the parent organization in development of a business information system. Studies the difficult problems associated with conducting a project using people and organizations that represent different cultures and politics and that may be separated by considerable distances. Also covers how to implement and carry out the development of the project using several information systems development methodologies.

IFMG 481 - Special Topics

Class Hours: var

Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 481 are primarily for upper-level undergraduate students.

IFMG 482 - Independent Study

Class Hours: var

Credits: 1-3

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

Individual research and analysis of contemporary problems and issues in a concentrated area of study under the guidance of a senior faculty member. Approval based on academic appropriateness and availability of resources.

IFMG 493 - Internship in MIS

Class Hours: var

Credits: 3-12

Prerequisite: IFMG 352, IFMG 390, consent of department chairperson

Positions with participating business, industry, or governmental organizations provide experience in systems analysis. Note: Can be taken as a 3cr major-area elective requirement.

Interior Design

INDS 105 - Introduction to Interior Design

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Presents an overview of the interior design profession. Emphasizes the responsibilities of the interior designer and the many career opportunities available.

INDS 110 - Color and Light

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Focuses on color and lighting fundamentals applicable to the environmental design of commercial and residential spaces. Includes general color and lighting terminology, theory of color visibility and perception, and how color and light work together to create functional, aesthetic, and sustainable interior environments.

INDS 118 - Interior Design Graphics

Class Hours: 1

Lab/Discussion: 3

Credits: 3

Introduces two- and three-dimensional traditional graphic skills including basic sketching, drafting, and perspective drawing as applicable to the responsibilities of interior designers. Emphasizes acceptable drafting standards, graphic layout, and visual organization through projects.

INDS 210 - Human Factors in Interior Design

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Examines the manner in which humans, including special populations, and the built environment interface within various cultural settings. Focuses on relevant building codes as they impact the health and safety of the individual. Emphasis placed on Universal Design concepts and accessible code compliance.

INDS 218 - Computer Technology for Interior Design

Class Hours: 1

Lab/Discussion: 3

Credits: 3

Introduces basic computer-aided drafting and design (CADD) for designers; emphasizes CADD theory and the value of the computer as a problem solving, design tool.

INDS 219 - Kitchen and Bath Design

Class Hours: 1

Lab/Discussion: 3

Credits: 3

Prerequisite: Junior standing

Explores many facets of the kitchen- and bath-design industry. Analyzes kitchen and bathroom spaces according to the National Kitchen and Bath Association (NKBA) standards. Utilizes current design software. (Offered as INDS 319 before 2017-18.)

INDS 230 - Presentation for Interior Design

Class Hours: 1

Lab/Discussion: 3

Credits: 3

Prerequisite: INDS 118

Introduces visualization approaches used for professional presentations of concepts. As a project-based course, the focus is on both two- and three-dimensional drawings and the use of color to create depth and enhance the quality of both traditional and digital drawings used to present interior design solutions.

INDS 240 - Three-Dimensional Design for Interior Design

Class Hours: 1

Lab/Discussion: 3

Credits: 3

Prerequisite: INDS 118

An introduction to three-dimensional design thinking and presentation. Exploratory exercises strengthen three-dimensional conceptual skills of interior space. Technical studies investigate presentation techniques, model-making, spatial theory analysis, and vocabulary.

INDS 313 - Building Systems I: Materials and Finishes

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Junior standing

Introduces the basic methods of structural and non-structural construction including ceilings, floors, walls, doors, and windows relative to interior space planning. Focuses on the materials and finishes used to complete the interior space, as well as those used on furniture, fixtures, and equipment. Examines manufacturing techniques, application, specification guidelines, estimating, and installation methods. Considers relevant codes, environmental issues, and impact on the responsibilities and decision making of interior designers.

INDS 315 - Residential Design Studio

Class Hours: 1

Lab/Discussion: 3

Credits: 3

Prerequisite: INDS 218

Applies interior design space planning and design problem-solving processes to residential design and emphasizes digital and graphic communication and presentation of those solutions.

INDS 323 - Building Systems II: Mechanicals

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: INDS 313

Provides a broad overview of the various architectural building systems (mechanical, lighting, electrical, plumbing, acoustic, thermal, communications, security, and conveyance) as they affect the responsibilities and decision making of interior designers. Addresses relevant building and fire codes, vocabulary, and environmental concerns.

INDS 370 - History of Interior Design and Architecture I

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Chronological study from ancient times to the mid-19th century of the dominant influences and characteristics of historical interiors, furniture, and ornamental design. Emphasis placed on stylistic detail and its relationship to social, economic, political, religious, and aesthetic influences and to the contemporary scene.

INDS 380 - History of Interior Design and Architecture II

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: INDS 370

Chronological study from mid-19th century to the present of the dominant influences and characteristics of interiors, furniture, and ornamental design. Emphasis placed on stylistic detail and its relationship to social, economic, political, religious, and aesthetic influences and to the contemporary usage.

INDS 405 - Interior Design Professional Practice

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Junior standing

Planning, business organization, management, contracts, procedures, and ethics for the professional interior designer.

INDS 460 - Portfolio

Class Hours: 1

Lab/Discussion: 2

Credits: 3

Prerequisite: Senior standing

Focuses on professionalism in the preparation of an interior design portfolio. Concentrates on traditional portfolio composition with an emphasis on the ability to transition to digital portfolio as necessary.

INDS 464 - Commercial Design Studio I

Class Hours: 1

Lab/Discussion: 3

Credits: 3

Prerequisite: INDS 319

Applies interior design space planning and design problem-solving processes to nonresidential design and links goals in interior design and facility management.

INDS 465 - Commercial Design Studio II

Class Hours: 1

Lab/Discussion: 3

Credits: 3

Prerequisite: INDS 464

A studio, project-based course, ascertaining the process to be followed in developing large-scale nonresidential interior design schemes of more than 10,000 square feet.

INDS 470 - Interior Design Capstone

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Senior Standing

Examines design issues in interior design research with faculty approval. Research is used in the development of a design program which informs a solution that focuses on the adaptive reuse of an existing building. Incorporates experience and knowledge gained from courses throughout the interior design curriculum. Culminates in a presentation of research findings and design solution.

Japanese

JAPN 101 - Elementary Japanese I

Class Hours: 4

Lab/Discussion: 0

Credits: 4

For beginning students. Introduces the Japanese language, with attention focused on three modes of communication: interpretive listening and reading, interpersonal speaking and writing, and presentational speaking and writing. Students learn pronunciation, fundamental grammatical patterns, and how to write hiragana, katakana, and basic kanji. Students learn to converse and ask questions in simple present and past time and become acquainted with aspects of Japanese culture and society. May not register for or take a D/F repeat in JAPN 101 when credit has already been received for a higher-numbered Japanese course.

JAPN 102 - Elementary Japanese II

Class Hours: 4

Lab/Discussion: 0

Credits: 4

Prerequisite: JAPN 101 or equivalent

A continuation of JAPN 101. Focusing on communication through listening, speaking, reading, and writing. Students continue to learn to identify and write basic kanji characters. Builds on the three modes of communication—interpretive, interpersonal, and presentational—to build proficiency in using the Japanese language in real-life situations. Also imparts knowledge of Japanese culture and society. May not register for or take a D/F repeat in JAPN 102 when credit has already been received for a higher-numbered Japanese course.

JAPN 201 - Intermediate Japanese

Class Hours: 4

Lab/Discussion: 0

Credits: 4

Prerequisite: JAPN 102 or equivalent

A continuation of JAPN 102. Focusing on communication through listening, speaking, reading, and writing so that students can function in everyday situations. Students continue to learn to identify and write intermediate kanji characters. Also imparts knowledge of Japanese culture and society. Liberal Studies credit is given. May not register for or take a D/F repeat in JAPN 201 when credit has already been received for a higher-numbered Japanese course.

Journalism and Public Relations

JRNL 102 - Basic Journalistic Skills

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Required for journalism and public relations majors and minors. Emphasizes grammar, punctuation, spelling, AP Stylebook, copyediting, headlines, and accuracy.

JRNL 105 - Journalism and the Mass Media

Class Hours: 3
Lab/Discussion: 0
Credits: 3

A critical examination of the roles-goals of the mass media (newspapers, magazines, radio and television, Internet and other online services) as they affect the American society socially, politically, culturally, and economically.

JRNL 120 - Journalistic Techniques for Professional Writing

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: ENGL 101, nonmajors/minors

Emphasizes intelligent use of writing ability in a journalistic style and understanding of the why of journalism and mass media. Practices and improves writing skills.

JRNL 126 - Introduction to Public Relations

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Introduces students to the principles, practices, programs, and possibilities in the various areas of public relations.

JRNL 215 - Media Convergence in Journalism

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Explores the digitization of journalism, public relations, and its many forms. Students learn how to digitize and work with media including the capture, editing, and distribution of new media, as well as the history and economics of digital media.

JRNL 220 - Writing for Media

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: JRNL 102 with a grade of "C" or better, journalism and public relations majors only

A course in journalistic style for students who plan to become professional writers. Teaches the basic journalistic formats and strategies used in print media—such as the summary lead, the delayed lead, and the conventional news-story format—and in digital and online media, such as writing for blogs and writing in chunks. Throughout, emphasizes economy, clarity, and the development of voice for a given medium.

JRNL 223 - Photojournalism

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: JRNL 105 or COMM 101 or instructor permission

An introduction to still photography for news media. Includes preparation of a portfolio and learning of specialized processing techniques for high-speed work.

JRNL 243 - History of the American Press

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: JRNL 105 or COMM 101

Traces the development of the American press from its Colonial roots. Emphasizes the role of the press in political and social development.

JRNL 250 - Women and the Press

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: ENGL 101

Explores the role of women in American journalism. Includes study of lives/careers of women journalists and their specific contributions to the profession. Emphasizes evolution of equal opportunity for women and other minorities in the American press. Attention to the changing definition of news as influenced by the inclusion of women and minorities in editorial roles.

JRNL 261 - Introduction to the Magazine Industry

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Sophomore standing or instructor permission

Introduces the magazine industry, how it is managed, how it functions, its strategies, and its roles and goals in society.

JRNL 281 - Special Topics

Class Hours: var
Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 281 are offered primarily for lower-level undergraduate students.

JRNL 301 - Presentation Making

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Gives practice in writing and making oral presentations based on public relations cases and problems. Familiarizes the student with problem-solving and small-group communication skills necessary for those working in the area of public affairs.

JRNL 310 - Writing for Online Media

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: JRNL 120 or JRNL 220 or instructor permission

Teaches techniques to help students develop reporting, writing, and editing skills to communicate effectively in an online media environment. Focuses on the continuum of the online news cycle, nonlinear nature, and interactive elements of the online platform and fundamental differences and similarities between online and traditional media, including ethical and legal uses.

JRNL 321 - Feature Writing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: JRNL 102, JRNL 220

For the student who might work in journalism or who might wish to write on a part-time or freelance basis.

JRNL 325 - Public Relations Campaigns

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: JRNL 126, JRNL 220

An advanced public relations course that teaches students to plan a comprehensive public relations campaign from start to finish, following the Research, Plan, Execute, Evaluate Model. Students outline plans for contacting media outlets and creating and maintaining social media communities. They create slogans and advertisements consistent with branding.

JRNL 327 - Layout, Design, and Production

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: JRNL 105 or COMM 101

Teaches basic techniques and theories of layout, design, and production, including typography, copy fitting, photos/art cropping and scaling, and steps in design process. Includes desktop publishing in the design of ads, newspapers, newsletters, brochures, and magazines.

JRNL 328 - News Reporting

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grades of "C" or better in JRNL 102, JRNL 105, and JRNL 220; majors only

Includes instruction in writing the news story, preparing copy, interviewing, covering special events, and similar reporting activities.

JRNL 337 - Editing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: JRNL 120 or JRNL 220

Stresses basic practices such as copyediting and headline writing while also focusing on guidelines for improving accuracy, clarity, transition, spelling, and punctuation of copy. Students use wire service stylebook extensively.

JRNL 344 - Issues and Problems

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: JRNL 105 or COMM 101

Examines critical case histories of ethical and professional situations and circumstances in the mass communication industry in a lecture and discussion format.

JRNL 345 - Sports Journalism

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: JRNL 220

Emphasizes skills for covering, writing, and editing of sports and introduces specific practices in newspaper, radio-TV, and sports information work.

JRNL 347 - Journalism Law and Ethics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: JRNL 105 or COMM 101, permission

Introduces students to the laws that govern the mass media in America, notably libel, privacy, and free press/fair trial and their impact on First Amendment rights of a free press. Also focuses on media ethics and its application in journalism.

JRNL 348 - Opinion Writing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Junior/senior standing

Emphasizes the writing of vigorous but thoughtful and fair editorials. Study of contemporary practice and policy on letters to the editor, columnists, cartoons, the op-ed page.

JRNL 361 - Presentation Making

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Emphasizes methods and skills used to make effective oral presentations, including principles of organization and research, creating focuses messages, language choices and delivery techniques, such as team oral presentations and platform presentations. Addresses supporting materials and the integration of technology with oral communication to deliver presentations appropriate to audiences across various disciplines.

JRNL 375 - World News Coverage

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Sophomore standing, instructor permission

Challenges students to compare and contrast the coverage of international news sources from around the world and how they impact people's awareness, attitudes, and behavior in a multiculturally differentiated world. Emphasis is placed on interpreting comparative coverage of events among the developing world and the Western-dominated international news media sources and understanding the geopolitics of world news. Students critique not only current international news but, more important, how it is reported. The goal is to foster a critical and analytical attitude toward news to gain a broad-based, balanced, global, and multicultural awareness of the human subjects of international news.

JRNL 400 - Professional Preparation and Portfolio

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: JRNL 328

Prepares majors for the professional world by exploring short- and long-term career goals, creating materials for self-marketing, and managing the personal and behavioral transition from college to the workplace in newspapers, magazines, public relations, and visual journalism.

JRNL 425 - Entertainment PR

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: JRNL 126, JRNL 220

An advanced public relations course that explores image building, image repair, and personal public relations as they relate to the entertainment industry. Students critically examine the entertainment field—to include sports, tourism, music, theater, movies—through a public relations lens.

JRNL 430 - Public Opinion and the News Media

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Junior standing

Deals with understanding and measuring public opinion. Emphasizes critically analyzing the historical origins and the dynamics of public opinion in the policymaking process as well as the role of the news media in public opinion. Students then measure people's thinking on any given issue or issues.

JRNL 450 - Advertising Writing

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: JRNL 220, instructor permission

A basic course in the preparation of advertising copy and continuity for all media. A combination of lecture and laboratory course. Enrollment is limited to upperclass majors.

JRNL 466 - Community Journalism

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Junior standing, permission

Emphasizes practical knowledge and skills in identifying, covering, and writing professionally about community issues and events, including local government, public affairs, the courts, and breaking news. Students also learn how to interview community leaders and use a variety of sources to access relevant information.

JRNL 481 - Special Topics

Class Hours: var
Credits: 1-3

Prerequisite: As appropriate to course content

Topics vary from semester to semester, covering a number of journalism specialties. From time to time they are converted to permanent course numbers. Special topics numbered 481 are offered primarily for upper-level undergraduate students.

JRNL 482 - Independent Study

Class Hours: var
Credits: 1-6

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

Opportunities for independent study that go beyond the usual classroom activities. Approval based on academic appropriateness and availability of resources; enrollment is limited to 15 upperclass majors per semester.

JRNL 483 - Honors Thesis

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Students must be a journalism and public relations major, hold a 3.25 cumulative GPA and a 3.5 GPA in the major, and obtain departmental permission. All required courses in the major must be completed before applying for this course.

Approval is based on academic appropriateness and availability of resources. One semester of research and writing will culminate in an honors thesis. Honors theses are approved by the department and completed under the direction of a department professor who specializes in the students' area of interest.

JRNL 490 - Public Relations Writing

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: JRNL 126, JRNL 220

A public relations writing class that includes assignments such as releases, features, newsletters, reports, biographies, rewrites, hometown stories, copyediting, interviewing, research, and special projects.

JRNL 492 - Problem Solving in Public Relations

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: JRNL 126

Introduces techniques for analyzing and tracking information flow in organizations. Introduces creative problem-solving techniques that are standard practice in corporate research groups.

JRNL 493 - Internship

Class Hours: var

Credits: 6-12

Prerequisite: Grades of "C" or better in JRNL 102, JRNL 105, JRNL 220, JRNL 328, JRNL 347, JRNL 400; 2.3 cumulative GPA and 2.5 GPA in the major; department approval

On-the-job training opportunities in journalism and related areas. Maximum of 6cr may be applied to 34cr minimum of major.

Kinesiology, Health, and Sport Science

KHSS 135 - Careers in Kinesiology, Health, and Sport

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Prerequisite: Health and physical education, physical education and sport, or athletic training majors

Emphasizes development of attributes associated with professionalism and examines occupational opportunities that exist for students majoring in kinesiology, health, and sport.

KHSS 142 - Foundations of Health, Physical Education, and Sport

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Health and physical education, physical education and sport, athletic training majors

Historical, philosophical, and psychosocial foundations of health and physical education are introduced. Specific emphasis is given to scientific theories and principles in such areas as health promotion and behavioral change, exercise physiology, motor development, kinesiology, and motor learning.

KHSS 143 - Wellness

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Choose one:

Contemporary Women's Wellness

Explores issues relating to the physical, emotional, and social aspects of special significance to women's health across the life span. Within the context of contemporary lifestyle and cultural influences, relevant health information affecting women of all ages, races, and ethnicities is presented. Current trends in the prevention and control of chronic diseases and health disorders as well as practical applications of information and resources to help each student develop a personal wellness plan and the knowledge to become a women's health advocate are emphasized. Successful completion fulfills the Liberal Studies Dimensions of Wellness requirements. Other 143 courses also fulfill this requirement, and any of these courses may be substituted for each other and may be used interchangeably for D/F repeats but may not be counted for duplicated credit.

Physical Well-Being

An overview of personal health and wellness. Emphasis is given to physical dimension in the attainment of well-being. Topical areas include, but are

not limited to, exercise and fitness, healthy eating and weight management, substance use and abuse, disease prevention, and sexuality. Also covers stress management and emotional wellness. Guides in the development of an individualized wellness plan to improve overall physical well-being. Successful completion fulfills the Liberal Studies Dimensions of Wellness requirement. Other 143 courses also fulfill this requirement, and any of these courses may be substituted for each other and may be used interchangeably for D/F repeats but may not be counted for duplicate credit.

Wellness through Strength Training

Promotes the attainment of personal well-being through the use of a comprehensive strength training program. Students will focus on the attainment of improved wellness by creating and participating in an exercise regime that focuses on muscular fitness, flexibility, and body composition. The exercise program will utilize a variety of resistive regimes including kettle bells, dumbbell circuits, and plyometrics. Students will evaluate their current level of fitness then participate in a physical activity self-improvement program. Meets Dimensions of Wellness for Liberal Studies requirement. Other 143 courses will also fulfill this requirement, and any of these courses may be substituted for each other and may be used interchangeably

KHSS 146 - Foundations of Exercise Science

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Examines the historical development of the exercise science field. Focuses on the importance of professionalism, certifications, and credentialing to be successful in the field. Reviews a variety of sub-disciplines, research, and current career opportunities in the field.

KHSS 162 - Scuba Diving

Class Hours: 0

Lab/Discussion: 2

Credits: 1

Teaches necessary skills and proper use of equipment for underwater swimming. Tanks, regulators, weights, and special equipment furnished. Student must purchase a mask, fins, and snorkel (approximately \$15). Includes theory as well as practical work.

KHSS 175 - Prevention and Care of Injuries to the Physically Active

Class Hours: 2

Lab/Discussion: 0

Credits: 2

Presents general information related to the prevention, recognition, and care of both acute and chronic injuries common to participants of physical activity/fitness and athletics. Includes prevention techniques, the classification and staging of injury conditions, and basic evaluation techniques, as well as emergency management and follow-up care procedures.

KHSS 185 - Introduction to Athletic Training

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Addresses the historical development of athletic training and the scope of present programs. Introduces the domains and competencies of the athletic training profession.

KHSS 209 - Motor Behavior

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Must be a major enrolled in Kinesiology, Health, and Sport Science Department or instructor permission
Studies the process of human motor behavior across the life span, specifically examining how development of mental and motor abilities affects human movement. Students are required to have appropriate child background clearances.

KHSS 213 - Recreational Sports and Lifetime Activities

Class Hours: 3
Lab/Discussion: 1
Credits: 3

Prerequisite: EDSP 102, KHSS 135
Provides exposure to contemporary recreational sports and lifetime physical activities. Includes an overview of all aspects for multiple physical activities, including the history, equipment, fundamental skills and assessment, rules, strategy, and etiquette.

KHSS 214 - Teaching Health Fitness and Gymnastics

Class Hours: 1
Lab/Discussion: 2
Credits: 1

Prerequisite: KHSS 209
Provides the health and physical educator with an overview of the fundamentals and techniques of instructing personal fitness and gymnastics. Includes opportunities for skill development, analysis, and strategies for incorporating fitness and gymnastics into the physical education curriculum.

KHSS 215 - Teaching Rhythmic Activities and Dance

Class Hours: 1
Lab/Discussion: 2
Credits: 1

Prerequisite: KHSS 209
An aesthetic and kinesthetic movement experience that prepares the student to be a teacher of basic movement in a variety of situations. Includes creative movement, rhythms, and square, folk, and contemporary dance.

KHSS 216 - Instruction of Fundamental Movement Skills

Class Hours: 3
Lab/Discussion: 1
Credits: 3

Prerequisite: EDSP 102, KHSS 209
An introduction to instructional methods of fundamental movement categories such as motor skills, manipulative, body management, rhythmic movement, and game skills. Emphasis is on program standards, objectives, and assessments for ages 6-12. An overview of characteristics of children and appropriate activities for this age group. Includes opportunities to improve personal skills, develop units, and teach peers and school-age children. (Titled Teaching Elementary Physical Education before 2015-16.)

KHSS 217 - Teaching Middle School Physical Education

Class Hours: 2
Lab/Discussion: 2
Credits: 2

Prerequisite: EDSP 102, KHSS 142
An introduction to instructional methods in physical education with an emphasis on program standards, objectives, and assessments for sixth through

eighth grades. An overview of characteristics of middle school children and appropriate activities for this age group. Includes opportunities to improve personal skills, develop units, and teach peers and school-age children.

KHSS 218 - Instruction of Tactical Skills and Fitness Concepts

Class Hours: 3

Lab/Discussion: 1

Credits: 3

Prerequisite: EDSP 102, KHSS 216

An introduction to instructional methods in strategic game skills used in many sports and activities with an emphasis on program standards, objectives, and assessments for ages 12-18. Strategies and techniques of instructing personal fitness for adolescents is also covered. An overview of characteristics of adolescents and appropriate activities for this age group. Includes opportunities to improve personal skills, develop units, and teach adolescents ages 12-18. (Titled Teaching Secondary Physical Education before 2015-16.)

KHSS 221 - Human Structure and Function

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Anatomical organization of the human body, surveyed in sufficient depth to prepare students for physiology, biomechanics, and adaptive physical education.

KHSS 225 - Social Issues in Sport

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Sport is a topic that permeates virtually all aspects of society. Investigates sport from historical, philosophical, and social perspectives. Various social theories are used to examine the interaction of sport and society through exploration of issues related to business, deviance, disability, gender, media, social class, politics, and race as they pertain to sport.

KHSS 242 - Emergency Health Care

Class Hours: 1

Lab/Discussion: 2

Credits: 1

Prerequisite: Admission to Teacher Education Program, junior standing

American Red Cross Standard, Advanced, and Instructor's certification and Multimedia Instructor's certification awarded upon successful completion.

KHSS 251 - Foundations of Safety and Emergency Health Care

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Focuses on accident prevention, injury control, and first responder's skills. Emphasizes identification of causes of accidents, recommended countermeasures, and mitigation. American Red Cross certifications are issued in (1) standard first aid, (2) community CPR, (3) instructor of standard first aid, and (4) instructor of community CPR.

KHSS 252 - Introduction to the Driving Task

Class Hours: 2
Lab/Discussion: 2
Credits: 3

Provides an in-depth treatment of operating a motor vehicle competently in all major variations and under most conditions encountered in traffic. A competent operator is one who performs the total driving task knowledgeably and skillfully and demonstrates full understanding and application of identification, prediction, decision, and execution process.

KHSS 256 - Applied Human Structure and Conditioning

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Physical education and sport/sport administration major

The emphasis is on developing an anatomical and physiological knowledge base as it applies to exercise, conditioning, and training of the physically active. Specific body systems presented include skeletal, muscular, cardio-respiratory, and nervous. Components of each system are addressed as they pertain to exercise and training concepts, such as speed, strength, muscular and cardiovascular endurance, flexibility, aerobic capacity, power, and other physiological factors related to performance and physical activity.

KHSS 261 - Water Safety Instructor

Class Hours: 1
Lab/Discussion: 2
Credits: 1

Prerequisite: Basic swimming skills

Students learn to teach children and adults basic swimming and water safety skills. Emphasis placed on proper body mechanics and teaching progressions. Students have opportunity to earn American Red Cross Water Safety Instructor certification upon successful completion of requirements.

KHSS 263 - Aquatics

Class Hours: 0
Lab/Discussion: 2
Credits: 1

Basic performance techniques in swimming strokes presented with special emphasis on teaching methodology, aquatic sports and games, water safety, skin diving, springboard diving, and other aquatic activities.

KHSS 270 - Sport Communication

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: ENGL 101

Provides an overview of sport communication, focusing on different communicative contexts including interpersonal, organizational, and public communication. Emphasizes media relations and skills essential for sport communication professionals, including handling media interactions, crises, and integration of positive public relation strategies. (Also offered as COMM 270; may not be taken for duplicate credit.)

KHSS 280 - Aquatic Management and Operation

Class Hours: 3
Lab/Discussion: 0

Credits: 3

Prepares the aquatic professional for management and operation of various aquatic facilities and venues. Includes topics on facility design and renovation, staff recruitment and management, risk management and facility safety concepts, legal aspects of aquatics, programming a profitable aquatic facility, and facility inspections. Offers nationally recognized certifications as part of the content delivery (Additional Fees May Apply).

KHSS 281 - Special Topics

Class Hours: var

Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 281 are offered primarily for lower-level undergraduate students.

KHSS 285 - Group/Individual Exercise Leadership

Class Hours: 1

Lab/Discussion: 2

Credits: 3

Prerequisite: Physical education and sport/exercise science majors, KHSS 221 with a grade of "C" or better, or BIOL 150 with a grade C or better
Provides theoretical knowledge of leadership skills necessary to design, implement, and evaluate safe and effective exercise programs in group and individual settings. An emphasis is placed on group exercise leadership and fitness instruction. Students are also introduced to the management and administration of such programs. Observations within the field are required, as well as opportunities to apply introductory concepts of exercise training through practical application.

KHSS 286 - Personal Training Practicum

Class Hours: 2

Lab/Discussion: 1

Credits: 3

Prerequisite: KHSS 221 or BIOL 150

Provides theoretical knowledge of leadership skills necessary to design, implement, and evaluate safe and effective personal training programs. Requires networking within the field as well as opportunities to apply introductory concepts of exercise training and business development through practical application.

KHSS 287 - Aquatic Fitness Instruction

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Prerequisite: KHSS 285

Provides a basic introduction to methods and techniques for aquatic fitness instruction. Introduces several different approaches to aquatic exercise and fitness from the client and instructor perspectives. Prepares students to lead individual and group exercise instruction in water-based environments to a variety of different populations.

KHSS 292 - Introduction to Sport Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces theories and practices in the field of sport management. Emphasizes management principles, leadership competencies, ethical principles, and governance in the sport industry. An introduction to sport marketing, sport finance, and sport law is provided.

KHSS 315 - Biomechanics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: A grade of "C" or better in KHSS 221 or a grade of "C" or better in BIOL 150
A study of the relationship between mechanical and physical principles and human movement.

KHSS 316 - Instruction of Child Health Concepts

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: EDSP 102, KHSS 142

Introduces the theories of instruction and methods for teaching health education to elementary school-aged children. Identifies developmentally appropriate teaching methods and activities, reviews and assesses current health curriculum, and demonstrates the use of technology in the instructional setting. Provides opportunities for observation, lesson planning, and teaching of health education to children. (Titled Teaching Elementary Health Education before 2015-16.)

KHSS 318 - Preprofessional Experience I

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: KHSS 209, KHSS 216, health and physical education majors only

Students assist a university faculty member teach in several instructional settings, including elementary school physical education program or community-based wellness programs. Students have the opportunity to apply pedagogical theory and concepts related to various professional areas. Emphasis is on planning, developing, implementing, and assessing educational experiences.

KHSS 319 - Field Practicum I

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Sophomore status

An initial experience in the professional work setting. Combines classroom theory with practical application through job-related experience to build on professional knowledge and skills. (Titled Preprofessional Experience II before 2016-17.)

KHSS 320 - Managing Facilities and Events in Sport

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Investigates the management functions necessary to operate a variety of sport facilities. Emphasizes liability risk reduction, staffing, design and renovation, maintenance, and amenities pertinent to sport facilities. Strategies for managing a sporting event are presented and practiced.

KHSS 325 - School and Community Health

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Introduces the role of school and community in protecting and promoting the health of its members. Topics include historical development of the concepts of health and health education, identification of national and community goals to reduce risk of disease and enhance health status, and the responsibilities of both school and community toward achieving these goals.

KHSS 330 - Assessment in Physical Education

Class Hours: 0
Lab/Discussion: 2
Credits: 1

Prerequisite: Health and physical education major

Provides preservice physical education teachers with an understanding of assessment strategies and techniques commonly used in physical education. Provides the opportunity to administer different motor skill and physical fitness assessments and to utilize computer applications associated with these assessments.

KHSS 333 - Psychology of Coaching

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Emphasizes the interaction between sport psychology and coaching strategies. Includes history of sports psychology, motivating athletes, coaching various personality types, and controlling emotions and stress in athletes. Focuses on the impact of social influence, group dynamics, and character development on sport performance. Examines aggression in sport as well as gender differences and cultural diversity issues.

KHSS 335 - Athletic Coaching

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Emphasizes coaching strategies and techniques for all sports. Includes coaching philosophy and style, motivating athletes and managing their behavior, teaching technical and tactical skills, and planning an approach to games and practices. Focuses on conditioning techniques, proper nutrition, and drug and alcohol prevention in athletes. The administration of the team, parents, referees, and liability risks is stressed. Examines aggression in sport, gender differences, cultural diversity issues, and the use of sport psychology strategies.

KHSS 341 - Evaluations and Analytics in Kinesiology

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Junior standing

Evaluation theory, instructional objectives, and cognitive test construction; technical and practical considerations in testing and interpretation of test results in both health and physical education.

KHSS 343 - Physiology of Exercise

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Health and physical education, physical education and sport/exercise science, athletic training majors and a grade of "C" or better in KHSS 221 or C or higher in BIOL 150

Physiological effects of exercise in humans. Major factors of diet, conditioning, physical fitness, maximum performance level, and fatigue.

KHSS 344 - Adapted Physical Activity and Sport

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: KHSS 209 and one of the following: KHSS 221, KHSS 256, or BIOL 150

Recognition of structural deviations, corrective exercises, physical activity, and sport for individuals with a wide range of disabilities

KHSS 345 - Survey of Orthopedic Injuries in Sport and Exercise

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grades of "C" or better in KHSS 221 or BIOL 150, and KHSS 185

A survey of common musculoskeletal injuries associated with participation in athletic activities, with emphasis on etiology, pathophysiology, and classification. General injury assessment and management procedures are also presented.

KHSS 346 - Preventive and Acute Care Skills in Athletic Training

Class Hours: 0

Lab/Discussion: 2

Credits: 1

Corequisite: KHSS 345

Develops essential athletic training skills for the beginning and intermediate athletic training student. Emphasizes athletic taping and wrapping, open and closed wound care, vital signs and anthropometric measurements, immobilization and ambulation devices, protective equipment fitting, and transportation and transfer of the injured athlete.

KHSS 347 - Physiology of Exercise Laboratory

Class Hours: 0

Lab/Discussion: 2

Credits: 1

Corequisite: KHSS 343

Laboratory experiences to illustrate physiological responses to exercise. Skills associated with the use of current laboratory equipment and techniques are developed. Supplements lecture-based content from KHSS 343.

KHSS 349 - Applied Pediatric Exercise Lab

Class Hours: 0

Lab/Discussion: 2

Credits: 1

Prerequisite: KHSS 343

Provides physical education students with an understanding of pediatric exercise concepts, particularly exercise programming, physical fitness, and assessment, related specifically to physical education. Provides the opportunity to practice administering field-based assessments of physical fitness and designing safe activities and/or exercise programs to enhance health, fitness, or performance in youth.

KHSS 350 - Health Aspects of Aging

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PSYC 101, SOC 151 or SOC 161, and junior standing

Current theory and research related to gerontology are introduced to increase understanding of the physical and psychosocial dimensions of aging. Additionally, emphasizes lifestyle factors and disease prevention aspects of aging. Recommended for students who plan to work with older adults.

KHSS 351 - Managing Budgets and Technology in Sport

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ECON 121, ECON 122 , and grade of "C" or better in KHSS 292

Provides information concerning the application of finance and accounting principles to managerial control of sport organizations. Examines current economic and financial issues that impact the sports industry. Topics include budget development, funding, capital projects, financial analysis, licensing, and economic impact studies related specifically to managing sport. Emphasizes specific software packages currently being used to manage sport organizations.

KHSS 353 - Driver Education Program Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Emphasizes the development, organization, and management of high school driver education from the standpoint of its historical development to its present programs designed to meet the demands of the highway transportation system. Special emphasis on the role of the teacher in conducting a high-quality program that meets with student, parent, school, and community approval.

KHSS 354 - Application of Driver Education Instructional Modes

Class Hours: 2

Lab/Discussion: 2

Credits: 3

Prerequisite: KHSS 251, KHSS 252, KHSS 353

Prepares prospective driver education teachers to plan, teach, and evaluate the four modes of driver education (classroom, on-road, simulation, and multiple-vehicle range). Teaching high school students in supervised laboratory sessions is provided.

KHSS 365 - Orthopedic Injury Assessment in Athletic Training

Class Hours: 3

Lab/Discussion: 2

Credits: 4

Prerequisite: KHSS 345, KHSS 346

Teaches assessment procedures, evaluation methods, and proper athletic training protocol for neuromuscular and musculoskeletal injuries. In addition, administrative issues in athletic training are addressed emphasizing accurate medical documentation. Emphasizes subjective and objective assessment and documentation of findings.

KHSS 370 - Adapted Health and Physical Education

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: EDSP 102, KHSS 209; at least one of the following: KHSS 214, KHSS 215, KHSS 216, KHSS 217, KHSS 218, KHSS 316
Introduces the educational issues and methods used to effectively instruct students with disabilities and other issues that become barriers to learning. Includes a study of current laws and guidelines regarding the legal rights of students with disabilities and their parents. Identifies low and high incidence of disabilities, recognitions of structural deviation, and corrective exercises. Introduces instructional adaptations to facilitate learning in the health classroom and gymnasium.

KHSS 373 - Business Administration in the Fitness Industry

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Provides practical tools regarding the feasibility of business planning, acquiring and managing a staff, operational concerns for each segment of the health and fitness industry (community, corporate, clinical, community and performance settings) and program development. Addresses the recommended guidelines set forth by the professional associations within the industry.

KHSS 375 - Physiological Basis of Strength Training and Conditioning

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Grade of "C" or higher in KHSS 221 or BIOL 150
Provides the anatomical and physiological basis of muscle function. Students also gain an understanding of changes that can be made through strength training and conditioning, along with knowledge of programs that will bring about these changes. Opportunities for working with various types of equipment are available.

KHSS 376 - Athletic Training Clinical Practicum I

Class Hours: 0
Lab/Discussion: 3
Credits: 3

Prerequisite: KHSS 345, KHSS 346
Develops and demonstrates proficient psychomotor skills within the domains of athletic injury prevention and acute care, in coordination with a one-semester clinical field experience. Allows an opportunity to practice and apply skills taught under the direction of a preceptor within the IUP Athletic Department or an affiliated clinical site. Emphasizes specific skills such as those relating to safety/risk management, conditioning, equipment fitting, taping and wrapping, acute care, and transportation/transfer of the injured athlete. Restricted to students seeking eligibility to sit for the Board of Certification (BOC) for the Athletic Trainer examination.

KHSS 377 - Athletic Training Clinical Practicum II

Class Hours: 0
Lab/Discussion: 3
Credits: 3

Prerequisite: KHSS 365
Develops and demonstrates proficient psychomotor skills within the domain of athletic injury assessment, in coordination with a one-semester clinical field experience. Allows an opportunity to practice and apply skills taught under the direction of a preceptor within the IUP Athletic Department or an affiliated clinical site. Emphasizes specific skills such as those relating to anatomical landmarks' identification, orthopedic evaluations, and neurological evaluations. Restricted to students seeking eligibility to sit for the Board of Certification (BOC) for the Athletic Trainer examination.

KHSS 380 - Organization and Administration in Athletic Training

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: KHSS 345 or instructor permission

Presents comprehensive instruction in such areas as health care administration; program, human, information, and resource management; and ethics and legal considerations in athletic training.

KHSS 385 - General Medical Conditions in Athletic Training

Class Hours: 2

Lab/Discussion: 2

Credits: 3

Prerequisite: KHSS 345 or instructor permission

An overview of general health assessment and physical examination techniques related to the athletic population. A systemic approach is used to address issues related to the anatomy, pathology, physiology, and diagnostic testing of both general conditions and diseases of the human body.

KHSS 410 - Exercise Prescription

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Physical education and sport/exercise science majors and KHSS 343 with a grade of "C" or better

Teaches individuals to write exercise prescriptions based on a subject's tolerance for physical activity. Special emphasis is on risk factors, techniques of evaluation, drugs, injuries, environmental factors, and motivation and their role in physical activity assessment.

KHSS 411 - Physical Fitness Appraisal

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: KHSS 343 with a grade of "C" or better

Involves the selection, administration, and interpretation of various tests for appraising the physical fitness levels of individuals. Information given concerning the various fitness components and discussions held so that each student gains an understanding of the variables to be tested.

KHSS 412 - Physical Activity and Stress Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Acquisition of necessary understanding of anxiety and stress, their nature, place in society, and intervention strategies as they relate to physical activity.

KHSS 413 - Wellness Coaching for Lifestyle Behavior Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: KHSS 343 with a grade of "C" or better

Presents major aspects of physical activity, its importance to the older adult, and the organization of an activity program. Attention to physiology of physical activity, effects of activity on growth and aging, exercise prescription, flexibility, overweight and obesity, and motivational strategies.

KHSS 414 - Exercise Electrocardiography

Class Hours: 1

Lab/Discussion: 1

Credits: 3

Prerequisite: Physical education and sport/exercise science majors and KHSS 343 with a grade of "C" or better

An introduction to the basic concepts of electrocardiography (ECG), including an understanding of electrophysiology, electrode lead placement, both rhythm strips and 12-lead interpretation. Utilizing electrocardiograms, students will also be able to recognize normal and abnormal rhythms, including those ECG abnormalities brought about by exercise. Normal and abnormal responses during Graded Exercise Testing are also interpreted.

KHSS 415 - Lifestyle Behavior Management for Physical Activity

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: KHSS 343 with a grade of "C" or better

Examines a variety of strategies necessary to modify health behavior with an emphasis on physical activity. Focus is placed on development of skills necessary to work with clients/patients in group leadership and group-process activities to assess and assist with behavior change for both the apparently healthy and those with multifaceted chronic disease as it relates to physical activity.

KHSS 416 - Functional Training for Strength and Conditioning

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: KHSS 343 and KHSS 375 with a grade of "C" or better

Focuses on comparing and contrasting the scientific principles associated with traditional strength training and functional strength training techniques. Examines a variety of new techniques found in the fitness and sport performance industry and provides practical experience in both traditional and functional strength training techniques.

KHSS 417 - Contemporary Issues in School and Community Health

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Provides pedagogical strategies relevant to educators in school and community health education settings. Assist students in identifying, analyzing, promoting, and evaluating recent developments and issues in health.

KHSS 420 - Health Education and Promotion at the Workplace

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: KHSS 325 or instructor permission

Addresses basic issues and problems in planning, implementing, and evaluating health education programming in a variety of school and worksite

settings. Explores agencies and programs focused on advocacy of health education services. Emphasizes knowledge and practical skills required to become a certified health education specialist.

KHSS 426 - Health Science Instruction

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: KHSS 316, KHSS 318

An overview of health curriculum with a focus on teaching methods and media of instruction. Includes unit development, opportunities for instruction, and guidelines for maintaining professional growth. Explores current research in teaching techniques, motivational strategies, and assessment of learning within a diverse population.

KHSS 436 - Corrective Exercise for the Health and Fitness Practitioner

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: KHSS 375 or instructor permission

Enhances understanding of the foundation of movement patterns as they apply to efficient human motion. Addresses the analysis of human motion in order to teach, modify, and enhance human motion in clinical and performance settings.

KHSS 437 - Coaching Disability Sport

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: KHSS 209 or instructor permission

Introduces developmentally appropriate practice when coaching individuals with disabilities. Emphasizes accessible and inclusive practices that promote full participation of individuals with various disabling conditions. Explores program planning and assessment in various disability sports and games. (Offered as KHSS 337 before 2016-17.)

KHSS 441 - Psychosocial Implications for Health and Physical Education

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Senior standing

A study of psychological and sociological influences, both theoretical and empirical, and their effects on health and physical performance.

KHSS 442 - Senior Seminar: Professional Development in Health, Physical Education, and Sport

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: 90cr completed

For majors of health and physical education and physical education and sport. Related to professional development issues and transition from college graduate to entry-level professional. Includes development of an electronic portfolio, assessment of postgraduation educational opportunities, and exploration of information literacy.

KHSS 445 - Business Practices in Sport

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grade of "C" or better in KHSS 292 and KHSS 320

Focuses on the application of business practices to operate a successful sports organization. Topics emphasized are promotion in sport, sport marketing, financing a sports organization, sport sponsorships, sales practices, public relations strategies, and media interaction. The unique application to the sport industry is emphasized.

KHSS 446 - Therapeutic Modalities

Class Hours: 3

Lab/Discussion: 2

Credits: 4

Prerequisite: KHSS 365

A basic introduction to the use of therapeutic modalities and the role they play in the rehabilitation of athletic injuries. Physical agents used in the care of athletic injuries are presented, highlighting the physiological effects of each modality, as well as indications and contraindications for their use.

KHSS 448 - Therapeutic Exercises for Athletic Injury Management

Class Hours: 3

Lab/Discussion: 2

Credits: 4

Prerequisite: KHSS 365, KHSS 375

The theoretical framework for athletic injury assessment and management of the injured athlete is discussed. A problem-solving approach to the selection and implementation of specific tests and development of skill in basic therapeutic exercise procedures for improving muscle performance, relaxation, and mobilization are included.

KHSS 450 - Curriculum and Programming in Sexuality Education

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Topics include anatomy and physiology of the human reproductive tracts, development, birth defects, contraception, venereal disease, and abortion. Not for credit toward degrees in biology.

KHSS 460 - Law and Issues in Managing Sport

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grade of "C" or better in KHSS 292

Emphasizes the interaction between the legal system and the sport industry. Topics include liability risk management, contracts, torts, sports agents, dispute resolution, and product liability. A focus on the influence of Title IX, antitrust exemption, religion, drug testing, and ergogenic aids on sport operations. The evolution of NCAA compliance and the issues that social media has on managing sport are included.

KHSS 465 - Sport Management Capstone

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Grade of "C" or better in KHSS 292, KHSS 320; 90cr completed

The emphasis is on improving personal effectiveness in the work environment for sport managers. Students develop observational skills and survey techniques needed for the sport industry. Thinking critically, problem solving, and applying transformative change models are emphasized. Discipline-specific research articles are examined and critiqued. Prepares students to market their skills to the sport industry.

KHSS 472 - Epidemiology of Physical Activity

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: BIOL 301

Covers physical activity epidemiology from the evidence of the relationship between physical activity and chronic disease and the assessment of physical activity and/or sedentary behavior. Explores individual and population-based lifestyle intervention efforts to enhance health behavior and promote disease prevention in diverse populations.

KHSS 476 - Athletic Training Clinical Practicum III

Class Hours: 0
Lab/Discussion: 3
Credits: 3

Prerequisite: KHSS 365, KHSS 385, KHSS 446

Develops and demonstrates proficient psychomotor skills within the domains of athletic training organization/administration and education/guidance, in coordination with a one-semester clinical field experience. Allows an opportunity to practice and apply skills under the direction of a preceptor within the IUP Athletic Department or an affiliated clinical site. Emphasizes specific skills such as those relating to communication, recordkeeping, planning, budgeting and purchasing, facility design, policies/procedures, and other athletic health care managerial/administrative duties. Athletic training instruction and guidance skills are also addressed. Restricted to students seeking eligibility to sit for the Board of Certification (BOC) for the Athletic Trainer examination.

KHSS 477 - Athletic Training Clinical Practicum IV

Class Hours: 0
Lab/Discussion: 3
Credits: 3

Prerequisite: KHSS 446, KHSS 448

Develops and demonstrates proficient psychomotor skills within the domain of athletic injury rehabilitation, in coordination with a one-semester clinical field experience. Allows an opportunity to practice and apply skills under the direction of a preceptor within the IUP Athletic Department or an affiliated clinical site. Emphasizes specific skills such as exercise, manual therapy, and other advanced musculoskeletal screening and therapeutic intervention techniques. Restricted to students seeking eligibility to sit for the Board of Certification (BOC) for the Athletic Trainer examination.

KHSS 480 - Professional Issues in Athletic Training

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: KHSS 380, KHSS 476

Explores topics related to professional development and responsibility in athletic training. Examines current research findings in athletic training. Addresses preparation for the Board of Certification (BOC) examination.

KHSS 481 - Special Topics

Class Hours: var

Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 481 are primarily for upper-level undergraduate students.

KHSS 482 - Independent Study

Class Hours: var

Credits: 1-3

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

Students with interest in independent study of a topic not offered in the curriculum may propose a plan of study in conjunction with a faculty member. Approval is based on academic appropriateness and availability of resources.

KHSS 492 - Senior Capstone in Exercise Science

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Physical education and sport/exercise science majors only. Grade of "C" or better in all of the following: KHSS 285, KHSS 286, KHSS 315, KHSS 343, KHSS 375, and either KHSS 410 or KHSS 411. May only take KHSS 410 or KHSS 411 concurrently with 492.

Students acquire the knowledge, skills, and abilities required to develop programs of physical activity and fitness for healthy adults and those with controlled disease. Experience in leading an exercise class and knowledge of functional anatomy and exercise physiology are also expected before participation in the class.

KHSS 493 - Internship

Class Hours: var

Credits: 1-12

Prerequisite: Physical education and sport/exercise science, physical education and sport/sport administration, and athletic training majors, senior status or permission. Senior standing required.

Integrates classroom experience with practical experience in community service agencies or industrial, business, or governmental organizations.

Korean

KORE 101 - Elementary Korean I

Class Hours: 4

Lab/Discussion: 0

Credits: 4

For beginning students. Introduces the Korean language, with attention focused on three modes of communication in present and past time frames: interpretive listening and reading, interpersonal speaking and writing, and presentational speaking and writing. Also imparts knowledge of Korean culture and society. Attendance is required. Students may not register for or take a D/F repeat in KORE 101 when credit has already been received for a higher numbered Korean course.

KORE 102 - Elementary Korean II

Class Hours: 4
Lab/Discussion: 0
Credits: 4

Prerequisite: KORE 101

A continuation of KORE 101. Focuses on communication through listening, speaking, reading, and writing. Students continue to learn to identify and write Korean characters. Builds on the three modes of communication—interpretive, interpersonal, and presentational—to build proficiency in using the Korean language in real-life situations. Also imparts knowledge of Korean culture and society. May not register for or take a D/F repeat in KORE 102 when credit has already been received for a higher-numbered KORE course.

KORE 201 - Intermediate Korean

Class Hours: 4
Lab/Discussion: 0
Credits: 4

Prerequisite: KORE 102

A continuation of KORE 102. Focuses on communication through listening, speaking, reading, and writing. Students continue to learn to identify and write complicated Korean vowels and consonants. Builds on the three modes of communication—interpretive, interpersonal, and presentational—to build proficiency in using the Korean language in real-life situations. Also imparts knowledge of Korean culture and society. Attendance is required. Students may not register for or take a D/F repeat in KORE 201 when credit has already been received for a higher-numbered KORE course.

Latin American Studies

LAS 350 - The Mayas: Culture, Literature, and Numbers

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Explores the world of the ancient and modern Mayan civilization, developing student understanding of a culture that differs from modern society. Through discussion of and hands-on activities involving Mayan geography, religion, calendar, mathematics, food, writing, and literature, students develop an appreciation of the dimensions of Mayan culture, enabling them to make generalizations about modern cultural development.

LAS 480 - Latin American Studies Seminar

Class Hours: 3
Lab/Discussion: 0
Credits: 3

A multidisciplinary colloquium emphasizing reading, discussion, and writing on specialized topics related to Latin American society, culture, history, literature, politics, geography, economics, and business. Topics include, but are not limited to, the nature of pre-Columbian cultures; the effects of colonialism and independence on present-day Latin America; the relationship between Latin America and the United States, Africa, and Europe; and the growing presence and significance of people of Hispanic descent in the United States. Open to all majors; required for Latin American studies minors.

LAS 481 - Special Topics in Latin American Studies

Class Hours: var
Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 481 are primarily for upper-level undergraduate students.

LAS 493 - Internship

Class Hours: var

Credits: 3

An internship allows engagement in an approved work environment. All internships are approved and administered by the LAS Coordinator. Location, duties, duration of internship and work hours are tailored to students' career goals. Internship sites represent a broad spectrum of Latin American Studies in embassies, education, health, or government agencies. A maximum of 3-credits of internship and/or practicum are permitted toward the minor. All internship sites are required to be compliant with university internship policies and requirements.

Leadership Studies

LDSP 361 - Foundations of Leadership

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces leadership by focusing on what it means to be a good leader and explores the practice and interplay of leadership with effective teamwork and communication. Examines topics such as the definition and nature of leadership, modern leadership theories, recognizing leadership/team traits, developing leadership/team skills, creating a vision, setting the tone, listening to team and out-group members, handling conflict, overcoming obstacles, and addressing ethics in leadership. Special attention is given to helping students understand and improve their own leadership performance. (Offered as LDSP 300 before 2017-18.)

LDSP 461 - Leadership Capstone

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Prerequisite: LDSP 361, 60 or more credits

Explores leadership through reflection and analysis of learning experiences within leadership minor. Emphasizes development of students' philosophies of leadership through self-reflection, peer-to-peer dialogue, and development of a life-long learning individual development plan with specific attention to: interpersonal dynamics; communication; analyzes leadership styles; thics; task vs. relationship behaviors; overcoming obstacles; diversity strengths; conflict management; leadership for change; individual strengths and weaknesses; establishing a constructive climate and reflective development of personal leadership and team member skills.

LDSP 482 - Experiential Applications in Leadership

Class Hours: var

Credits: 2-3

Prerequisite: LDSP 361, Prior approval through the Teamwork and Leadership Studies director, Student's Dean, and Office of the Provost Independent study providing an opportunity to engage in a leadership practicum.

Provides an experiential learning experience for students in organizational leadership positions, or direct observation of a day-to-day leader, to practice personal team member and leadership skills. Experiential applications can be performed in industry, academia, government, municipalities, and select student leadership positions. Each experiential application, detailing the nature of the leadership position and experience, must be approved by the Team and Leadership Studies Program Director prior to 1) starting experience and 2) before the end of the drop/add period. Students will log a minimum of 25 hours of coursework and 50 hours experiential work for 2cr or 37.5 hours of coursework and 75 hours experiential work for 3cr (50 minutes coursework and 100 minutes experiential work (150 minutes total) per week per credit for 15 weeks)

Lesbian, Gay, Bisexual, Transgender, and Queer Studies

LGBT 200 - Introduction to Lesbian, Gay, Bisexual, Transgender, and Queer Studies

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Introduces students to lesbian, gay, bisexual, transgender, and queer (LGBT&Q) studies as an interdisciplinary academic field; draws substantially on sociology, psychology, history, politics, religion; considers literary and media representations of the LGBT&Q populations and experiences. Focuses on the exploration of the cultural, social, historical, and political understandings of sexuality and gender marginality that have shaped identities in modern times. Addresses contemporary issues related to LGBT&Q individuals and communities and critically examines the meaning and representation of heterosexuality and gender normativity in relation to LGBT&Q experiences. Considers key intersections of sexual orientations, identities, and behaviors in relation to age, race, ethnicity, and social class.

LGBT 400 - Queer Theory

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Familiarizes students with the scholarship and theories surrounding sexualities, sexual identities, and gender identities. Examines the literature and evidence on the ways in which social forces influence sexualities and gender (orientation, identity) as well as performance (how we humans act out our sexuality). Analyzes literatures on the diversity of non-hegemonic desires, behaviors, orientations, identities, and communities and related issues from a trans-historical, cross-cultural, and interdisciplinary perspective. Explores the ways human sexualities and gender identities are themselves social forces as societies respond to sexual variations in terms of identities such as gay, lesbian, bisexual, transgender, queer, questioning, and a range of heterosexualities.

Library

LIBR 151 - Introduction to Information Literacy

Class Hours: 1
Lab/Discussion: 0
Credits: 1

Information literacy is the ability to locate, evaluate, and use information effectively. These skills are essential to students while in college but also for success in their personal and professional lives after they have graduated. Students explore online, print, and non-print information resources and hone their information-seeking skills and knowledge as they relate to critical thinking, resource analysis, and the ethical and appropriate use of information and develop a base level of information literacy skills. (Titled Introduction to Library Resources before 2014-15.)

LIBR 152 - Information Issues and Resources for the Health Sciences

Class Hours: 1
Lab/Discussion: 0
Credits: 1

Prerequisite: Enrollment in one of the following programs: nursing and allied health professions; food and nutrition; kinesiology, health, and sport science; or public health

An in-depth look at how information is located and used in the health sciences, including a variety of traditional and non-traditional resources, as well as the cost of that information, the availability of misinformation, evaluation techniques for evidence-based practice, and the role of the Institutional Review Board (IRB) in health sciences research.

LIBR 201 - Internet and Multimedia

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: BTED/COSC 101/IFMG 101 or prior exposure to word processing and electronic mail

Focuses on the evaluation of information and multimedia resources available on electronic networks when doing research in an area of one's choice. An information literacy course is for students to gain a more in-depth understanding of the information resources available electronically and of how to utilize them more effectively in communicating. Students learn how to access and utilize these resources for two-way communications and support for decision making while incorporating selected elements in multimedia presentations of their own design. (BTED/COMM/COSC/IFMG/LIBR 201 may be used interchangeably for D/F repeats and may not be counted for duplicate credit.)

LIBR 251 - Information Access in the Digital Age

Class Hours: 2

Lab/Discussion: 0

Credits: 2

An introduction to library research equips the student with information literacy skills so that the student is able to determine the extent of information needed; access the needed information effectively and efficiently; evaluate information and its sources critically; incorporate selected information into one's knowledge base; use information effectively to accomplish a specific purpose; understand the economic, legal, and social issues surrounding the use of information; and access and use information ethically and legally. Provides conceptual and practical expertise as an information networker to locate, evaluate, and use effectively the needed information. Basic knowledge of computer applications is helpful.

Living Learning

LLRN 100 - Cocurricular Activity Lab

Class Hours: 0

Lab/Discussion: 2

Credits: 0.5

Corequisite: Enrolled in a Living-Learning Certificate Program

A first-year practical cocurricular experience to enhance the course work contained in the Living Learning Certificate Program.

LLRN 200 - Cocurricular Activity Lab

Class Hours: 0

Lab/Discussion: 2

Credits: 0.5

Corequisite: Enrolled in a Living-Learning Certificate Program

A second-year practical cocurricular experience to enhance the course work contained in the Living Learning Certificate Program.

Mathematics

MATH 100 - Intermediate Algebra

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Basic course in algebra including factoring, exponents and radicals, systems of linear equations, complex fractions, and inequalities. For those students who lack the basic algebraic skills required in MATH 105 or MATH 110. Will not meet Liberal Studies math requirements. May not be taken after successfully completing MATH 105 or MATH 110 or a calculus course without written Mathematical and Computer Sciences Department chairperson approval.

MATH 101 - Foundations of Mathematics

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Introduces logic and a mathematical way of analyzing problems; develops an appreciation for the nature, breadth, and power of mathematics and its role in a technological society; introduces useful mathematics or mathematics related to student interests. Possible topics include logic, problem solving, number theory, linear programming, probability, statistics, intuitive calculus, introduction to computers, mathematics of finance, game theory. May not be taken after successfully completing a math course with a larger course number without written Mathematical and Computer Sciences Department chairperson approval. This course also may not be taken by students who place into DVST 083 until successful completion of said course without written Mathematical and Computer Sciences Department chairperson approval.

MATH 105 - College Algebra

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MATH 100 or appropriate placement test score or permission of the Mathematical and Computer Sciences Department chairperson. Teaches students to appropriately analyze and interpret numerical, graphical, and algebraic representations to enable them to model complex situations using mathematical structures and increase their problem-solving skills. Particular focus is given to polynomial, exponential, and logarithmic functions in order to prepare students for further study in business calculus and/or statistics. May not be taken after successfully completing either a calculus course or MATH 110 without written Mathematical and Computer Sciences Department chairperson approval.

MATH 107 - Business Mathematics

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MATH 100 or appropriate placement test score, for majors in Eberly College of Business and Information Technology. This course may not be taken after successfully completing a calculus course without written approval from the Mathematical and Computer Sciences Department chair.

Corequisite: MATH 108. A student who has already passed MATH 108 can take 107 alone.

Focuses on polynomial, exponential, and logarithmic business models. Explores methods to appropriately analyze and interpret numerical, graphical, and algebraic data sets generated from business applications. Introduces the central ideas of calculus with particular emphasis to business applications of derivatives and integrals.

MATH 108 - Applications of Business Mathematics

Class Hours: 1
Lab/Discussion: 0
Credits: 1

Prerequisite: MATH 100 or appropriate placement test score, for majors in Eberly College of Business and Information Technology.

Corequisite: MATH 107. A student who has already passed MATH 107 can take 108 alone.

Focuses on business models and applications in a computer classroom setting where appropriate technology is used to apply concepts from MATH 107 to solve problems in business. Emphasis is given to the application of calculus through the use of mathematical software.

MATH 110 - Elementary Functions

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MATH 100 or appropriate placement test score or permission of the Mathematical and Computer Sciences Department chairperson. Prepares mathematics and science students for the study of calculus. Topics include detailed study of polynomial, exponential, logarithmic, and

trigonometric functions. May not be taken after successfully completing a calculus course without written Mathematical and Computer Sciences Department chairperson approval.

MATH 111 - First-year Seminar

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Prerequisite: Mathematics, Applied Mathematics, Actuarial Mathematics, or Mathematics Education major, and less than 60 earned credits. A first-year seminar experience that acclimates students to mathematical culture, curricular, and co-curricular experiences associated with transitioning to college mathematics. Includes application of theories of change as related to transition to higher education, and provides a perspective of the diversity of mathematical areas for research and careers associated with a mathematics degree. Emphasis includes reading and writing about mathematics.

MATH 115 - Applied Mathematics for Business

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 105 or MATH 110 or appropriate placement test score or permission of the Mathematics Department chairperson. A review of elementary functions, including logarithmic and exponential functions. Business majors are introduced to the central ideas of calculus (limit, derivative, and integral). Applications to business and economics are emphasized. May not be taken after successfully completing a calculus course without written Mathematics Department chairperson approval.

MATH 121 - Calculus I for Natural and Social Sciences

Class Hours: 4

Lab/Discussion: 0

Credits: 4

Prerequisite: MATH 105 or MATH 110 or appropriate placement test score or permission of the Mathematical and Computer Sciences Department chairperson. A review of elementary functions, including logarithmic and exponential functions. Natural and social science majors are introduced to the central ideas of calculus, including limit, derivative, and integral. Applications to natural and social sciences are emphasized. May not be taken after successfully completing a calculus course without written Mathematical and Computer Sciences Department chairperson approval.

MATH 122 - Calculus II for Natural and Social Sciences

Class Hours: 4

Lab/Discussion: 0

Credits: 4

Prerequisite: MATH 121. Applications of integrals to natural and social sciences, functions of several variables, trigonometric functions, sequences and series, numerical methods, and differential equations.

MATH 125 - Calculus I/Physics, Chemistry, Mathematics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 110 or equivalent placement (algebra, geometry, and trigonometry)

The first of a three-semester sequence for math and science majors covering the theory of calculus and its application in problem solving. Topics include functions, limits, continuity, derivatives, application of derivative, integrals, and applications of the integral. (Trigonometric, exponential, and logarithmic functions are included.)

MATH 126 - Calculus II/Physics, Chemistry, Mathematics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 125 or the equivalent

The second of a three-semester sequence for math and science majors. Topics include techniques and applications of integration, sequences and series, convergence tests, Taylor polynomials, separable differential equations, vectors, and three-dimensional coordinates. (Trigonometric, exponential, and logarithmic functions are included.)

MATH 150 - Strategies for Success in Collegiate Mathematics

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Facilitates a successful transition from high school mathematics to collegiate mathematics. Includes explicit and implicit strategies for success in mathematics courses. Does not meet Liberal Studies math requirements. Note: May not be taken after successfully completing MATH 105 or 110 or a calculus course without written Department of Mathematical and Computer Sciences chair approval.

MATH 151 - Elements of Mathematics I

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Appropriate major: special education, speech and language pathology, deaf education, family and consumer sciences education, art education, child development and family relations, middle level education 4-8, early childhood education, or early childhood/special education. Topics included are mathematical systems, systems of numeration, developing the set of integers, rational numbers, real numbers, and the four function operation concepts.

MATH 152 - Elements of Mathematics II

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 151, Child Development & Family Relations, Speech and Language Pathology, Early Childhood Ed/Special Ed, Family & Consumer Science Education, Middle Level Education, Art Education, Early Childhood Education, Special Education majors only
Topics included are organizing and analyzing data, statistics, probability, geometric shapes measurement, congruence and similarity, coordinate geometry, and transformational geometry.

MATH 153 - Elements of Algebra

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 151

Explores some of the basic algebraic concepts including the real number system and solving linear equations and inequalities with one and two

variables. An emphasis will also be placed on studying the coordinate plane, exploring the slope of a line, graphing lines, and writing equations of lines. Connections are made with the teaching and learning of algebraic concepts in the elementary and middle schools.

MATH 171 - Introduction to Linear Algebra

Class Hours: 3

Lab/Discussion: 0

Credits: 3

An introduction to vector spaces, linear transformations, determinants, and matrix algebra. Topics are presented in a direct and intuitive approach.

MATH 214 - Probability and Statistics for Business Majors

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Studies the methods of describing data, probability theory, discrete and continuous random variables, sampling distributions, estimation and tests of hypothesis for means, proportions, and variance, and simple linear regression and correlation.

MATH 216 - Probability and Statistics for Natural Sciences

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 121 or MATH 125

Frequency distributions, graphical representations of data, measures of central tendency and variation, correlation and regression, probability, probability distributions, and sampling distributions. Inferential statistics including confidence intervals and parametric and nonparametric tests of hypotheses. Emphasis is on applications in the natural sciences using graphing calculators and statistical software.

MATH 217 - Probability and Statistics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: For non-mathematics majors

An applied statistics course that uses basic statistical methodologies to explore data and answer research questions. Summarization, analysis and interpretation of data from the social sciences and other related areas. Topics include frequency distributions, graphical summaries, elementary probability, estimation, testing hypotheses, and correlation and regression. Emphasis upon applications using appropriate technology, as opposed to theoretical development of topics.

MATH 225 - Calculus III/Physics, Chemistry, Mathematics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 126 or the equivalent

The third of a three-semester sequence for math and science majors. Topics covering the calculus of functions of several variables include vector functions and space curves, arc length, curvature, partial derivatives, gradients, areas and volumes in various coordinate systems, Lagrange multipliers, line integrals, Green's Theorem, and applications of multiple integrals. (Trigonometric, exponential, and logarithmic functions are included.)

MATH 271 - Introduction to Mathematical Proofs I

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 121 or MATH 125; MATH 171

Gives basic ideas necessary to prove results in mathematics. Includes but is not limited to logic of mathematics, basic methods of proof, algebra of sets, equivalence relations and partitions of sets, functions, and mathematical induction.

MATH 272 - Introduction to Mathematical Proofs II

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 126 and MATH 271 with a grade of "C" or better

A further study of the basic ideas of contemporary mathematics. Topics include but are not limited to mathematical induction, cardinality of sets, relations, methods of proof in number theory, analysis, and algebra.

MATH 281 - Special Topics

Class Hours: var

Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 281 are offered primarily for lower-level undergraduate students.

MATH 309 - Discrete Mathematics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COSC 110 and MATH 121 or MATH 125

Topics include set algebra, mappings, relations, semigroups, groups, directed and undirected graphs, Boolean algebra, and propositional logic, with examples and applications of these various areas of computer science. Emphasizes developing an intuitive understanding of basic structures rather than formal theories and influence of these topics on theory and practice of computing. (Offered as MATH 219 before 2016-17.)

MATH 317 - Probability and Statistics for Mathematics Instruction

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Mathematics education major or MATH 152, sophomore standing

Introduces concepts of probability and statistics by exploring and discovering key ideas related to data analysis and making predictions. Appropriate technology is incorporated. Explores curricular materials, resources, and activities relevant to teaching diverse groups at the middle and secondary levels.

MATH 320 - Mathematics for Early Childhood

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: grades of "C" or better in MATH 152 and ECED 200, may not be taken concurrently

Studies child-centered, activity-oriented mathematics programs for early childhood education (PreK-grade 1). Focuses on helping children develop understanding and insight into basic concepts of mathematics through the use of manipulative materials.

MATH 330 - Teaching Mathematics in the Elementary School

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: grades of C or better in ECED 280 and MATH 320, may not be taken concurrently

Examines contemporary curriculum and methods of instruction used in elementary school mathematics (grades 2-4). Students become acquainted with books, materials, and other resources helpful to prospective teachers. Activities include experiences in teaching elementary school mathematics.

MATH 340 - Principles of Secondary School Mathematics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 271

Provides students with mathematics content and mathematical thinking they need to teach in secondary schools, as well as to connect the content learned in college mathematics courses with the secondary curriculum. Open to secondary mathematics education majors only.

MATH 341 - Differential Equations

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 122 or MATH 126

Emphasizes techniques of solution and applications of differential equations. Topics include first order equations, second order linear equations, systems of linear equations, and series solutions of differential equations. (Offered as MATH 241 before 2016-17.)

MATH 342 - Advanced Mathematics for Applications

Class Hours: 4

Lab/Discussion: 0

Credits: 4

Prerequisite: MATH 122 or MATH 225; MATH 341

Deals with the application of mathematics to problems of science. Emphasizes the three phases of such an application and the development of skills necessary to carry out each step: (1) translation of the given physical information to a mathematical model; (2) treatment of the model by mathematical methods; (3) interpretation of the mathematical result in physical terms. Topics include vector calculus, integral theorems, Fourier series, partial differential equations, and the Laplace transformation.

MATH 343 - Introduction to Numerical Methods

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: COSC 110, MATH 121 or MATH 125

Algorithmic methods for function evaluation, roots of equations, solutions to systems of linear equations, function interpolation, numerical differentiation, and integration and use of spline functions for curve fitting. The focus is on managing and measuring errors in computation. Also offered as COSC 343; either MATH 343 or COSC 343 may be substituted for the other and may be used interchangeably.

MATH 350 - History of Mathematics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 122 or MATH 126 or instructor permission

Development of the central concepts of mathematics from ancient times up to the development of calculus in the 17th century. Mathematical concepts are placed in historical perspective. The use of the history of mathematics as a pedagogical tool and its relationship to other sciences is addressed.

MATH 353 - Theory of Numbers

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 271 with a grade of "C" or better

Divisibility, congruences, primitive roots, number theoretic functions, Diophantine equations, continued fractions, quadratic residues.

MATH 355 - Foundations of Geometry I

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 171, MATH 271 with grades of "C" or better

Studies various groups of transformations and geometries associated with these groups in the Euclidean plane. The Euclidean Similarity and affine and projective groups of transformations are studied.

MATH 363 - Mathematical Statistics I

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 216; MATH 225

Probability theory necessary for an understanding of mathematical statistics is developed. Applications of set theory to models, combinations and permutations, binomial, Poisson and normal distributions, expected values, and moment generating functions. (may be taken concurrently)

MATH 364 - Mathematical Statistics II

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 363

Multivariate distributions, change of variable technique, chi-square distribution, estimation, confidence intervals, hypothesis testing, contingency tables, goodness of fit. Practical applications are used to aid in the development.

MATH 371 - Linear Algebra

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MATH 171, MATH 271 with a grade of "C" or better
Vector spaces and linear transformations are studied in a theoretical setting. Also, canonical forms and multilinear algebra are studied.

MATH 411 - Univariate Data Analysis

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MATH 214 or MATH 216 or MATH 217 or instructor permission
An applied statistics course in descriptive statistics, statistical inference procedures, regression analysis, analysis of variance, and analysis of deviance. Inference procedures for population means and proportions are developed. Simple linear regression, multiple linear regression, one-way ANOVA, two-way ANOVA, Poisson regression, and logistic regression models are used to analyze data. Emphasizes the applied aspects of these statistical models and uses computer software for data analysis.

MATH 412 - Multivariate Statistics

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MATH 214 or MATH 216 or MATH 217 or instructor permission
An applied statistics course that focus on multivariate statistical methods. Research procedures on the relationship among variables, significance of group differences, prediction of group membership, and structure exploration are introduced. Factorial analysis of variance, analysis of covariances, multivariate analysis of variance and covariance, path analysis, factor analysis, and discriminate analysis are introduced and used to analyze data. Emphasizes the applied aspects of these statistical methods and uses computer software for data analysis.

MATH 413 - Methods for Teaching Mathematics

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Mathematics education major or MATH 152, sophomore standing
Examines the current curricula and methods of instruction used in middle and secondary level mathematics classrooms. Follows an investigative approach to middle-level and secondary mathematics instruction through hands-on activities that are standards based. Explores methods of teaching in diverse classrooms and teaching students with special needs.

MATH 416 - Time Series Analysis

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MATH 363 or MATH 411 or ECON 356 or instructor permission
Applied statistics course in the analysis and forecasting of time series data. Linear time series regression models, ARIMA models, SARIMA models, GARCH models, and spectral theory are used to examine time series data. Emphasizes the applied aspects of these models. Computer software is used for data analysis.

MATH 417 - Statistical Applications

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MATH 214 or MATH 216 or MATH 217 (for non-mathematics majors)

Using computer programs, a wide array of statistical procedures for educational research workers is explored. Basic concepts of statistical inference and prediction are reviewed, including regression analysis and prediction, hypothesis testing, analysis of variance and covariance, and partial and multiple correlation. Emphasizes use of the computer and interpretation of computer printouts, along with understanding techniques employed. No computer knowledge is necessary.

MATH 420 - Patterns and Functions for Elementary/Middle-Level Teachers

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MATH 152

Examines and develops expertise with sequences, patterns, and functions, including linear, quadratic, logarithmic, exponential, and trigonometric functions. Appropriate technology is incorporated. Explores curricular materials, resources, and activities relevant to teaching diverse groups at the elementary/middle level.

MATH 421 - Advanced Calculus I

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MATH 272 with a grade of "C" or better

A study of set theory, real number system, functions, topology of Cartesian space, sequences, convergence and uniform convergence, continuity, and uniform continuity.

MATH 422 - Advanced Calculus II

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MATH 421

Includes the study of convergence sequences in \mathbb{R}^n , global properties of continuity, uniform continuity, differentiation of \mathbb{R}^n , Riemann integrals, and infinite series.

MATH 423 - Complex Variables

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MATH 225

An introduction to the theory of functions of a complex variable. Topics included are elementary functions, analytic functions, conformal mapping, integration, series, and application.

MATH 427 - Introduction to Topology

Class Hours: 3
Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 272 with a grade of "C" or better

A study of sets, functions, continuity, compactness, the separation axioms, and metric spaces; application of topology to analysis is demonstrated.

MATH 430 - Seminar in Teaching Secondary School Mathematics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Junior status (60cr or more), a declared major in mathematics education

Prerequisite or Corequisite: EDUC 242

Provides insights into the teaching and learning of numbers and operations, algebra, geometry, measurement, probability, and statistics. Students become aware of and use the resources and methods of instruction for teaching mathematics at the secondary level. Must be taken within two semesters before student teaching.

MATH 445 - Deterministic Models in Operations Research

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 122 or MATH 225; MATH 171

An introduction to using the basic tools of solving deterministic models in operations research. Includes optimization techniques and applications such as linear programming, nonlinear and dynamic programming, transportation models, and network models. In addition, sensitivity analysis, duality, simplex methods, and integer programming are discussed. Uses technology to solve problems and interpret the results.

MATH 446 - Probabilistic Models in Operations Research

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 122 or MATH 225; MATH 171; MATH 216

A survey of probabilistic methods for solving decision problems under uncertainty. Probability review, decision theory, queuing theory, inventory models, and Markov chains are covered. Uses technology to solve problems and interpret the results.

MATH 447 - Modeling and Simulation

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 122 or MATH 126; MATH 171; MATH 216

Construction and solution of mathematical models. Emphasizes applications in areas such as logistics, natural and social sciences, and manufacturing. Discrete and continuous system models are analyzed using mathematical and computer-based methods. An introduction to computer simulation. An introductory course in differential equations is recommended but not required.

MATH 448 - Introduction to Financial Mathematics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 115 or MATH 125 or MATH 121; and MATH 214 or MATH 216 or MATH 217

A rigorous mathematical treatment of the theory associated with financial transactions is undertaken. Geometric series and other concepts are used to construct mathematical models for analytically pricing various financial securities based on the time value of money. Studies how to construct mathematical models for pricing cash flows and explores the equivalency of different cash flows. Includes a detailed study of interest theory and financial economics. Prepares students for the Society of Actuaries Financial Mathematics (FM) exam.

MATH 450 - Topics in Applied Computational Mathematics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 171, MATH 225, and COSC/MATH 343 or instructor permission

Focuses on using computational methods to solve applied mathematics problems. Content varies from year to year. Students gain experience in solving practical problems, using various mathematical software packages, giving oral presentations, preparing technical reports, reading field-related journals, and integrating scientific visualization.

MATH 456 - Geometry for Mathematics Instruction

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Enrolled in mathematics education, sophomore standing

Students become acquainted with an informal, intuitive approach to geometry. Activities and materials for teaching geometrical concepts to students are an integral part of the course.

MATH 457 - Number Theory for Mathematics Instruction

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Enrolled in mathematics education, sophomore standing

An introduction to topics of elementary number theory including divisibility, prime numbers, factorization, binary numbers, modular arithmetic, identification codes, cryptography, Diophantine equations, Euclidean algorithm, and alternative algorithms. Explores curricular materials, resources, and activities relevant to teaching number theory at the middle and secondary levels.

MATH 458 - Logic and Logical Games for Elementary/Middle-Level Teachers

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 152

Basic ideas, terminology, and notation of mathematical logic as well as games of strategy that involve logic. Engages in methods of reasoning and proof in games and in mathematics content. Explores curricular materials, resources, and activities relevant to teaching logic and reasoning at the elementary/middle level.

MATH 459 - Technology in Elementary/Middle-Level Mathematics Instruction

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 152

Develops the knowledge, skills, and perspectives required for using educational technology in teaching mathematics at the elementary/middle level. Hands-on experiences with technology are an important focus.

MATH 460 - Technology in Mathematics Instruction

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Enrolled in mathematics education, sophomore standing

Provides preservice mathematics teachers with expertise in instructional technology for teaching mathematics. Emphasizes the integration of pedagogy and subject matter knowledge.

MATH 461 - Discrete Mathematics for Mathematics Instruction

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Enrolled in mathematics education, sophomore standing

Topics in discrete mathematics, including systematic counting, graph coloring, networks, and their applications, as well as the historical background and the role of discrete mathematics in today's world. Uses a problem-solving, hands-on approach to content. Explores curricular materials, resources, and activities relevant to teaching discrete mathematics at the middle and secondary levels.

MATH 471 - Algebra for Mathematics Instruction

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Enrolled in mathematics education, sophomore standing

Topics include multiple representations of sequences, integers, expressions, equations, systems of equations, inequalities, and matrices. Representations of expressions and equations are explored through the use of hands-on and visual aids and with appropriate technology. Connections are made with the teaching and learning of algebraic concepts.

MATH 476 - Abstract Algebra I

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 272 with a grade of "C" or better

Development of theory of integral domains, fields, rings, and groups; designed to develop student's power to think for himself or herself and to improve ability to construct formal proofs.

MATH 477 - Abstract Algebra II

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 476

Continues study of algebra by use of axiomatic method; Euclidean domains; polynomial domains and extension fields included; interrelationships

between these structures and simpler structures, particularly groups and rings, are developed as in study of Galois group of a polynomial and in an introduction to Galois theory.

MATH 480 - Senior Seminar

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Senior standing (90 or more credits)

Assesses the effectiveness of the mathematics curriculum and provides mathematics majors with a culminating mathematical experience. Also focuses on synthesizing mathematics skills while researching, developing, and presenting a mathematical topic. Students solve practical problems, use various mathematical software packages, give oral presentations, and prepare technical reports.

MATH 493 - Internship in Mathematics

Class Hours: var

Credits: 3-12

Prerequisite: Completion of core curriculum, completion of application

Positions with participating companies or agencies provide students with experience in mathematics-related work under the supervision of the agencies and faculty. Requirements include one to three on-site consultations, two university consultations, completion of progress reports, and presentation of final cumulative paper. Internship credit may not be used in fulfilling mathematics major course requirements.

Clinical Laboratory Science

MEDT 494 - Clinical Microbiology

Class Hours: var

Credits: 6-10

Identification and clinical pathology of bacteria, fungi, viruses, and parasites. Techniques to isolate, stain, culture, and determine antimicrobial susceptibility. Instrumentation; quality control.

MEDT 495 - Clinical Chemistry

Class Hours: var

Credits: 7-10

Enzymology, endocrinology, biochemistry of lipids, carbohydrates, and proteins; metabolism of nitrogenous end products; physiology and metabolism of fluids and electrolytes; and toxicology as related to the body and diseases. The technical procedures include colorimetry, spectrophotometry, electrophoresis, chromatography, automation, and quality control.

MEDT 496 - Clinical Hematology/Coagulation

Class Hours: var

Credits: 4-7

The composition and function of blood; diseases related to blood disorders; the role of platelets and coagulation. Manual and automated techniques of diagnostic tests for abnormalities.

MEDT 497 - Clinical Immunohematology

Class Hours: var
Credits: 3-6

Blood antigens, antibodies, crossmatching, hemolytic diseases, and related diagnostic tests. An in-depth study of blood donor service and its many facets such as transfusions, medico-legal aspects, etc.

MEDT 498 - Clinical Immunology/Serology

Class Hours: var
Credits: 2-4

Immune response, immunoglobulins, autoimmunity, and complement and related tests and diseases. Survey and demonstration of serological diagnostic tests.

MEDT 499 - Clinical Seminar

Class Hours: var
Credits: 0-6

Other courses that are not included in the above (such as orientation, laboratory management, education, clinical microscopy) and/or are unique to the individual hospital program.

Management

MGMT 101 - Business Success Seminar

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Provides a seminar level introduction to the interdependent functional and support areas of business, such as accounting, finance, information systems, management, and marketing; which are critically important for building a solid foundation for academic and career success in business fields. Focuses on the development of decision-making, communication, and teamwork skills through experiential learning. Emphasizes strategies for academic success including time-management, utilization of university resources, and career and professional development opportunities in business.

MGMT 105 - Introduction to Business

Class Hours: 3
Lab/Discussion: 0
Credits: 3

An introduction to business, emphasizing critical issues affecting the business world, such as globalization, technology, ethics, and diversity. An overview of the various functional areas of business, it provides an understanding of the need for integration of those functional areas for success in business. Stresses experiential learning, develops team building skills, strengthens oral and written communication skills, and provides for personal interaction with university faculty. An introduction to career opportunities and curriculum choices in business. (Offered as BTST 105 before 2014-15.)

MGMT 275 - Introduction to Entrepreneurship

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Sophomore status

Entrepreneurship is defined, common myths discussed, and basic characteristics of entrepreneurs identified and reviewed. Includes topics such as

psychology of entrepreneurship, economic and social aspects of entrepreneurship, history, techniques of purchasing a company, new venture initiation, and risk taking.

MGMT 300 - Human Resource Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PSYC 101

Recognizes and evaluates the application of behavioral science approaches in the study of human resource management. Includes recruiting and selection, training, management development, performance evaluation, communications, wage and benefit programs, and management-labor relations.

MGMT 310 - Principles of Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Provides an in-depth identification and understanding of the relevant theories, concepts, and principles underlying the management function.

MGMT 311 - Human Behavior in Organizations

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PSYC 101

Focuses on human problems of management. Presents basic ideas and theories from the behavioral sciences as they apply to human behavior in organizations. Emphasizes management solutions to problems resulting from individual-organization interaction.

MGMT 325 - Small Business Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MGMT 275 or junior standing

A survey course emphasizing aspects of small business management not covered elsewhere in the student's program. Key topics include real estate, site selection, and facilities management; purchasing management, vendor relations, and inventory systems; plant security, loss control, risk and insurance management; human resources management, employee benefits, motivation, and leadership; small business market research, customer services management, and pricing. A review of other elements of the small firm's milieu is included as a necessary contextual element (e.g., planning, accounting, financing, law).

MGMT 330 - Production and Operations Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 105 or MATH 107, and MATH 214 or MATH 216 or MATH 217, junior standing, Eberly College of Business and Information Technology or approved major

A study of converting an organization's inputs into outputs whether in goods-producing or service industries. An overview of concepts, tools, and techniques used in management of the production and operations function in organizations.

MGMT 350 - International Business

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MGMT 310

Studies the international dimensions of business and the critical environmental and organizational factors that affect managerial approaches in the international arena. Focuses upon the impact of cultures, women, religions, ethnic minorities, racial minorities and country uniqueness upon international businesses. (Students cannot earn credit for both MGMT 350 and MKTG 350, unless the course is a D/F repeat, whereupon it will serve as a substitute for the original D/F course.) (Also offered as MKTG 350.)

MGMT 400 - Compensation Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MGMT 300

Studies the policies and programs that help managers design and administer compensation systems for private and public sector enterprises. Includes motivation theories and practice designing of compensation systems.

MGMT 401 - Management Development and Training

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MGMT 300, MGMT 310

Principles, problems, and procedures in planning, organizing, directing, and controlling all aspects of training and development programs in a business enterprise. Methods of improving and development of managerial skills are emphasized.

MGMT 402 - Seminar in Human Resource Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MGMT 300, graduating senior

An integrative course in human resource management. Considers current issues in human resource management literature and contemporary topics in the human resource management field using case studies.

MGMT 403 - Small Business Planning

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: BTED/COSC 101/IFMG 101, MGMT 325

Integrates the content of much of the business core and relates it to the business planning for small businesses and entrepreneurial efforts. Introduces the concepts that support the development of an effective business and marketing plan.

MGMT 405 - Organizational Staffing

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MATH 214, MGMT 300

Focuses on the "staffing" or "employment" subsystem of the human resource management function and deals with the theoretical, technical, administrative, and legal issues involved in the recruitment, selection, placement, transfer, and promotion of individuals by organizations. Includes human resource planning, job analysis, job descriptions and specifications, recruitment and selection process, equal employment opportunity and affirmative action, reliability and validity of selection instruments and techniques, and contemporary issues in selection.

MGMT 428 - Seminar in Management

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MGMT 310

An integrative course in management. Considers current literature in the field and contemporary issues in management using case studies.

MGMT 434 - Industrial Quality: Statistical Tools and Management

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MATH 214

Industrial Quality course emphasizes statistical, technological and managerial tools, techniques and concepts that pervade the entire supply chain in today's industrial environment as well as the factory of the future (FoF). FoF will be powered by "Industry 4.0," which will rely on Industrial Internet of Things (IIoT), smart sensors, robotics, and artificial intelligence among other advances.

MGMT 437 - Supply Chain Modeling and Analysis

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MGMT 330 or equivalent

Builds on the core concepts of operations management and industrial engineering to design, evaluate, and deploy supply chains with a focus on quantitative tools and technological issues. Deals with supply chain functioning based on deterministic and stochastic modeling, mathematical optimization, computer simulation, and heuristics. Focuses on technological trends in optimizing supply chains. Introduces supply chain related computer applications such as ERP and CRM.

MGMT 440 - Introduction to Energy Management

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Junior standing

Introduction to the global energy markets and business with a particular emphasis on hydrocarbon based resources including petroleum, natural gas, and coal resources. Also includes exposure to nuclear, hydroelectric, solar, wind, and other "alternative" energy technologies.

MGMT 451 - International Management

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MGMT 310

Focuses on the complex role of multinational corporations (MNCs) in today's global economy. Offers an in depth perspective on planning, organization structure, managerial decision making, and human resource management in global structures and differences between MNCs and domestic organizations. Emphasizes the impact of cultures, women, religions, ethnic minorities, racial minorities and country uniqueness upon international management.

MGMT 452 - Comparative Management

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MGMT 310

An intensive, comparative study of management and organization across the globe. A variety of comparative management systems, models, and theories are presented, and research findings are examined.

MGMT 454 - International Competitiveness

Class Hours: 3
Lab/Discussion: 3
Credits: 3

Prerequisite: MGMT 310

Focuses on how nations and firms seek to improve or sustain their competitive positions in a changing global marketplace. Explores a wide range of contemporary topics such as global economic challenges, trade interdependence, the impact of cultures, women, religions, ethnic minorities, racial minorities and country uniqueness upon the competitiveness of emerging forms of businesses.

MGMT 459 - Seminar in International Management

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MGMT 310, senior standing

An analysis of recent literature and developments related to global business issues such as strategic alliances, human resource management in global environments, global assignments, Japanese business system, and multinational corporations in the world economy.

MGMT 461 - Organizational Leadership Theory

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Junior standing, Eberly Business Majors; Junior status for Non-Business majors or Instructor's permission

Introduces the various leadership styles such as autocratic, laissez-faire, transformational, transnational, visionary and others as they relate to today's global business/corporate environment. These styles and their effectiveness as well as examples of application are discussed.

MGMT 462 - Applied Business Leadership Skills

Class Hours: 3
Lab/Discussion: 0

Credits: 3

Prerequisite: Junior standing, MGMT 461 or instructor permission

Focuses on current leadership styles and applications in business. The effectiveness of these styles is critically examined and evaluated with a cross-culture emphasis. Advanced, innovative, and exploratory business leadership topics and their effect on the behavior of employees, cooperation, and productivity are discussed.

MGMT 472 - Organizational Entrepreneurship

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MGMT 275 or MGMT 310

Explores the theories related to intrapreneurship and managing innovation and technology. Theory based but practice oriented. Through case discussions, students learn how to apply the analytical tools of strategic management and organizational theory to address important challenges faced by today's managers.

MGMT 481 - Special Topics in Management

Class Hours: var

Credits: 1-3

Covers advanced, innovative, or exploratory topics and disciplines within management. Specific content items developed by instructor. Credits may be applied to either required (by permission of department chairperson) or free electives in a student's program.

MGMT 482 - Independent Study

Credits: 3

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

Individual research and analysis of contemporary problems and issues in a concentrated area of study under the guidance of a senior faculty member. Approval based on academic appropriateness and availability of resources.

MGMT 492 - Small Business/Entrepreneurship Internship

Class Hours: var

Credits: 3-12

Prerequisite: MGMT 403, permission of department chairperson, 2.75 cumulative GPA, all other requirements of the Eberly College of Business and Information Technology

Involves practical entrepreneurial experience of on-site consulting with small business firms. Students generally work for a semester on functionally related topics in accounting, finance, marketing, and MIS or on general topics such as business planning, forecasting, policy, and general management.

MGMT 493 - Management Internship

Class Hours: var

Credits: 3-12

Practical experience to develop knowledge and skills in the application of theory to actual problems in a nonclassroom setting. A maximum of 3cr of internship in the student's major may be applied toward the management and human resource management major area elective requirements.

Additional internship credit must be used as free electives only. Admission only by permission of the department chairperson and dean, Eberly College of Business and Information Technology.

MGMT 495 - Business Policy

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Completion of all business core requirements; graduating seniors

A capstone case analysis course that gives practice in applying business theories to the solution of management problems. An analysis of how top management determines strategy and policy and influences the philosophy and character of the company. Develops a general management viewpoint that integrates the various functions of the organization.

Middle-Level Education

MIDL 221 - Literature for Middle Level

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Admission into Teacher Education Step 1

A survey of children's literature for middle-level students and examines the role of motivation in developing lifelong readers. Selection and evaluation criteria for each genre, including multicultural literature, are developed and applied. Classroom application and extensions of literature are explored, and current issues in the field of literature for middle-level learners are examined. Appropriate adaptations for resistant readers, students with exceptional needs, and students who are learning English are explored.

MIDL 222 - Reading Instruction and Assessment in Grades 4-8

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Admission into Teacher Education Step 1; middle-level education 4-8 major

Provides preservice teachers with various strategies, techniques, and materials related to teaching reading in grades 4 through 8. Current research and practical applications are interwoven to ensure a systematic coverage of the most recent methods and best practice for diverse students in grades 4 through 8.

MIDL 310 - Instructional Theory and Planning for the Middle Level

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Admission into Teacher Education Step 1; middle-level education 4-8 major

Competencies specific to the art and science of teaching adolescents are introduced with a focus on academic, social, and emotional developmental characteristics of young adolescents as they transition to the middle school. Familiarizes students with the fundamentals of middle-level learning and teaching theory and correspondingly appropriate models of teaching. Planning for instruction is evidenced through the development of lesson and unit plans that reflect utility in inclusive and diverse settings.

MIDL 311 - Social Studies Instruction and Assessment in Grades 4-8

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Junior status (60cr or more)

An overview of social studies methods instruction in the middle school classroom. Includes the study of objectives, trends, patterns and principles of organization, and techniques of instruction as it relates to social studies content areas: geography, Pennsylvania history, United States and world history, economics, and civics and government. Instruction includes assessment strategies for diverse middle school learners in inclusive classroom settings.

MIDL 312 - Science Instruction and Assessment in Grades 4-8

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Admission into Teacher Education Step 1; BIOL 103, GEOS 101/GEOS 102, SCI 105 all strongly recommended

Emphasizes science as it relates to middle school students and curriculum, planning for teaching science, and recent innovations in science teaching.

MIDL 315 - Classroom Management and Adolescent Development

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Junior status (60cr or more)

For middle-level education 4-8 majors to create a professional classroom management plan that supports the healthy development of all young adolescents in a diverse middle school environment. Students discuss, analyze, and apply major concepts, principles, theories, and research related to young adolescent development, including adolescents with special needs and English language learners.

MIDL 321 - 21st-Century Literacies for Diverse Learners

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Teaches the impact of technology in the field of literacy of all subjects. Addresses issues and trends related to the use of technology. Includes technology integration in the curriculum and the incorporation of appropriate technologies to support diverse learners.

MIDL 408 - Literacy in the Content Areas

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MIDL 222

Provides preservice teachers with various strategies, techniques, and materials related to teaching reading and writing in various content areas. Current research and practical applications are interwoven to assist teachers in the development of successful methods for comprehending text in science, social studies, health, English, and mathematics. For undergraduate students as a special elective or as a required course for majors in middle-level education with a specialization in English/language arts.

MIDL 422 - Diagnostic and Remedial Reading

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Teacher Education Step I

Helps educators identify causes of reading disability in middle-level learners. Methods of diagnosis, procedures, and materials for remedial work are

discussed. Strategies to improve students' content acquisition are included through both group and individual remediation. For undergraduate students seeking certification for middle-level education with a specialization in English/language Arts.

MIDL 425 - Methods of Teaching Language Arts in Grades 4-8

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MIDL 222 with a grade of "C" or better

Emphasizes the view that the art of communication is an interrelated process, and the task of the middle grades teacher is to integrate the language arts throughout the entire curriculum. Techniques for teaching oral and written communication skills, listening, viewing, and visually representing are presented. Other integral components include spelling instruction to meet the developmental needs of middle-level learners and methods for increasing vocabulary growth. Special emphasis is given to recent trends and research in middle grades education.

Marketing

MKTG 320 - Principles of Marketing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ECON 122

A study of those activities necessary to the design, pricing, promotion, and distribution of goods and services for use by organizations and ultimate consumers.

MKTG 321 - Consumer Behavior

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MKTG 320, PSYC 101

A survey of noteworthy contributions of behavioral science and research on consumer purchasing and decision-making process, with particular attention to formal and informal influence patterns.

MKTG 350 - International Business

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MGMT 310

Studies the international dimensions of business and the critical environmental and organizational factors that affect managerial approaches in the international arena. Focuses upon the impact of cultures, women, religions, ethnic minorities, racial minorities and country uniqueness upon international businesses. (Students cannot earn credit for both MGMT 350 and MKTG 350, unless the course is a D/F repeat, whereupon it will serve as a substitute for the original D/F course.) (Also offered as MKTG 350.)

MKTG 420 - Marketing Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MKTG 320, MKTG 321, junior standing

An analysis of marketing and operational problems and policies involved in planning, organizing, coordinating, and controlling a total marketing program.

MKTG 421 - Marketing Research

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MKTG 320, MATH 214

Nature, methods, analysis, and application of present-day marketing research techniques utilized in the solution of practical marketing problems.

MKTG 430 - International Marketing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MKTG 320

International marketing and markets are analyzed. Special consideration is given to the significance of government regulations, organization structures of export and import enterprises, and credit policies.

MKTG 431 - Business-to-Business Marketing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MKTG 320

Concerned with the major activities involved in the marketing of industrial goods and services, including the industrial marketing system, marketing information needs of the industrial firm, industrial marketing implementation and control, and channel, pricing, product, and promotional strategies for industrial goods.

MKTG 433 - Advertising

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MKTG 320

An introduction to the principles, practices, and creations of advertising. Use of various media and legal, economic, social, and ethical aspects of advertising are also considered.

MKTG 434 - Business Logistics: Technical Analysis and Applications

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Senior standing, MKTG 320, MGMT 330

Implements a technical and analytical approach for designing and executing the logistics functions within business supply chains. Analyzes and evaluates the key logistical domains of order processing, inventory functions, warehousing, transportation, distribution, and customer service elements using quantitative methods and management science techniques. Applies a systems perspective for optimization of logistical parameters toward industrial marketing and operations efficiencies in the varied dynamics of transactional fulfillment.

MKTG 435 - Professional Selling and Sales Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MKTG 320

Introduces the role and nature of modern personal selling in marketing. Theory and practice of personal selling process, sales planning, delivering sales presentations, and relationship marketing are emphasized. Basics of managing sales force including territory management, recruiting, training, and compensating sales force are also covered.

MKTG 436 - Retail Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MKTG 320, junior standing

Introduces students to all facets of retailing, including the history of retailing, retail theories, and decision making in retailing framework.

MKTG 437 - Services Marketing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MKTG 320

Focuses on current theories and applications of marketing techniques in the fast-growing area of services in the business, government, and nonprofit sectors. Emphasizes characteristics of services and their marketing implications and formulation and implementation of marketing strategies for service firms.

MKTG 439 - Internet Marketing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MKTG 320

Presents a strategic framework for developing marketing strategies on the Internet. Extends the marketing mix framework to e-commerce using current theories and applications in online product, online pricing, web-based marketing communication, and distribution strategies. Other topics include marketing research on the Internet, electronic retailing, Internet-based customer relationship management, and legal-ethical dimensions of e-marketing. Students use Internet-based, online marketing cases.

MKTG 440 - Direct Marketing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MKTG 320

An introduction to the role and nature of direct marketing, including its current theory and practice. Topics include designing and implementing direct mail marketing, telemarketing, catalog marketing, e-mail marketing and Web/Internet based direct marketing for consumer and industrial markets. Case studies and applications are utilized. Social, public policy, and legal issues in direct marketing are also explored.

MKTG 442 - Social Cause Marketing for Nonprofit Organizations

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MKTG 320 or instructor permission

Prepares managers of nonprofit organizations and those whose mission is to plan and implement strategies for social change in society. Topics and activities will focus on strategic and tactical marketing approaches and planning and organizing for effective control of market performance of nonprofit organizations and programs.

MKTG 443 - New Product Design and Branding

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MKTG 320

Discusses the new product design, development, branding, and launch process companies use to bring a new concept to market by satisfying customers' unmet needs. Blends the perspectives of marketing and design and the process of product creation. A step-by-step process from product planning and concept generation to commercialization and product launch planning is covered.

MKTG 444 - Green Marketing

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MKTG 320

Entails a diverse perspective to understanding the impact of human consumption on the environment and development of marketing strategies to improve the human-environment interaction through creation, communication, and delivery of superior value and customer relationship management.

MKTG 445 - Social Media Marketing

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MKTG 320 or equivalent

Explores the online marketing activities, practices, and interactions of individuals and organizations using conversational electronic media. Assorted social media interactive networking tools and applications are examined. Students study and develop social media marketing programs.

MKTG 448 - Brand Design

Class Hours: 1.5
Lab/Discussion: 2
Credits: 3

Prerequisite: MKTG 320

An integrated study of branding concepts in marketing and art, including aesthetics in commercial art, design of brand and corporate identity trademarks, theories of brand marketing and business strategy, customer touchpoints in brand communication and branding as a corporate strategy. (Also offered as ART 448; may not be taken for duplicate credit.)

MKTG 450 - Marketing Strategy

Class Hours: 3
Lab/Discussion: 0

Credits: 3

Prerequisite: MKTG 320; senior standing

Develops marketing and business decision-making skills to evaluate real-world business situations, analyzes marketing problems and scenarios, and produces solutions in the form of marketing and business strategies. Involves analyses based on quantification of marketing decisions and problem-solving scenarios using exercises and in-depth case studies that develop analytical reasoning. This senior-level course integrates knowledge of marketing and other business management functions into marketing strategy development, implementation, and control using either a marketing plan or marketing simulation exercises. Readings on classic and emerging issues provide applied perspectives of marketing in the business environment.

MKTG 481 - Special Topics I

Class Hours: var

Credits: 3

Prerequisite: As appropriate to course content

Covers advanced, innovative, or exploratory topics and disciplines within marketing. Specific content items developed by instructor. Credits may be applied to either required (by permission of department chairperson) or free electives in a student's program. Special topics numbered 481 are primarily for upper-level undergraduate students.

MKTG 482 - Independent Study

Class Hours: var

Credits: 3

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost. Approval is based on academic appropriateness and availability of resources.

Individual research and analysis of contemporary problems and issues in a concentrated area of study under the guidance of a senior faculty member.

MKTG 493 - Marketing Internship

Class Hours: var

Credits: 3-12

Practical experience in the marketing field to develop knowledge and experience in the practical application of theory to actual problems in a nonclassroom situation. A maximum of 3cr of internship in the student's major may be applied toward the marketing major-area elective requirements. Additional internship credit must be used as free electives only. Admission only by permission of the department chairperson and the dean, Eberly College of Business and Information Technology.

Military Science

MLSC 101 - Introduction to Military Science

Class Hours: 2

Lab/Discussion: 1

Credits: 2

A study of the organization of the United States Army and the role of the military in today's society. Emphasizes the customs and traditions of the service, the Total Army concept, and the fundamentals of leadership. Includes instruction in basic military skills, land navigation, and personal nutrition and fitness. Also, see Leadership Laboratory.

MLSC 102 - Fundamentals of Military Science

Class Hours: 2

Lab/Discussion: 1

Credits: 2

The study of the basic knowledge regarding military service and the profession of arms. Emphasizes basic military skill, first aid, and the development of leadership abilities through practical exercises. Includes instruction on offensive and defensive tactics, the Army writing style, and military briefings. Also, see Leadership Laboratory.

MLSC 191 - Army ROTC Physical Fitness Development I

Class Hours: 0

Lab/Discussion: 3

Credits: 1

Prerequisite: MLSC students only

Principles of individual and group physical fitness through the planning and execution of fitness training for all participating students. Primarily hands-on, performance-oriented training. Students are challenged with scheduling and executing PRT programs that ensure their future soldiers and units are prepared to successfully perform their wartime mission. This curriculum instills effective leadership that is essential to the success of future military leaders.

MLSC 192 - Army ROTC Physical Fitness Development II

Class Hours: 0

Lab/Discussion: 3

Credits: 1

Prerequisite: MLSC students only

Principles of individual and group physical fitness through the planning and execution of fitness training for all participating students. Primarily hands-on, performance-oriented training. Students are challenged with scheduling and executing PRT programs that ensure their future soldiers and units are prepared to successfully perform their wartime mission. This curriculum instills effective leadership that is essential to the success of future military leaders.

MLSC 203 - Fundamentals of Tactical Operations, Techniques of Leadership, and Weapons Characteristics

Class Hours: 2

Lab/Discussion: 1

Credits: 2

Organization, techniques, resources, and capabilities involved in conducting small-unit tactical operations. Emphasizes leadership, organization, and management techniques needed to cause a group of people to accomplish specific objectives. Characteristics of military weapons systems are taught. Students serve as leaders in Leadership Labs.

MLSC 204 - National Security and Fundamentals of Military Topography

Class Hours: 2

Lab/Discussion: 1

Credits: 2

The study of national security concepts, policies, and national decision-making process with emphasis on national resources, national will, and economic factors. Includes a study of nuclear and conventional response options. Fundamentals of military topography, including the use of military maps to determine topographic features, to conduct land navigation, and to perform terrain analysis, are covered. Also, see Leadership Laboratory.

MLSC 291 - Army ROTC Physical Fitness Development III

Class Hours: 0

Lab/Discussion: 3

Credits: 1

Prerequisite: MLSC students only

Principles of individual and group physical fitness through the planning and execution of fitness training for all participating students. Primarily hands-on, performance-oriented training. Students are challenged with scheduling and executing PRT programs that ensure their future soldiers and units are prepared to successfully perform their wartime mission. This curriculum instills effective leadership that is essential to the success of future military leaders.

MLSC 292 - Army ROTC Physical Fitness Development IV

Class Hours: 0

Lab/Discussion: 3

Credits: 1

Prerequisite: MLSC students only

Principles of individual and group physical fitness through the planning and execution of fitness training for all participating students. Primarily hands-on, performance-oriented training. Students are challenged with scheduling and executing PRT programs that ensure their future soldiers and units are prepared to successfully perform their wartime mission. This curriculum instills effective leadership that is essential to the success of future military leaders.

MLSC 305 - Fundamentals of Leadership and Modern Learning/Teaching Relationship

Class Hours: 3

Lab/Discussion: 1

Credits: 3

A study in practical application of principles of leadership/management as applied in classroom and field to include case studies in psychological, physiological, and sociological factors that affect human behavior; individual and group solution of leadership problems common to small units. Also, see Leadership Laboratory.

MLSC 306 - Study of Advance Leader Planning and Execution of Modern Combat Operations

Class Hours: 3

Lab/Discussion: 1

Credits: 3

An analysis of leader's role in directing and coordinating efforts of individuals and small units in execution of offensive and defensive tactical missions, to include command and control systems, the military team, and communications techniques. Also, see Leadership Laboratory.

MLSC 391 - Army ROTC Physical Fitness Development V

Class Hours: 0

Lab/Discussion: 3

Credits: 1

Prerequisite: MLSC students only

Principles of individual and group physical fitness through the planning and execution of fitness training for all participating students. Primarily hands-on, performance-oriented training. Students are challenged with scheduling and executing PRT programs that ensure their future soldiers and units are prepared to successfully perform their wartime mission. This curriculum instills effective leadership that is essential to the success of future military leaders.

MLSC 392 - Army ROTC Physical Fitness Development VI

Class Hours: 0

Lab/Discussion: 3

Credits: 1

Prerequisite: MLSC students only

Principles of individual and group physical fitness through the planning and execution of fitness training for all participating students. Primarily hands-on, performance-oriented training. Students are challenged with scheduling and executing PRT programs that ensure their future soldiers and units are prepared to successfully perform their wartime mission. This curriculum instills effective leadership that is essential to the success of future military leaders.

MLSC 407 - Management of the Military Complex to Include Fundamentals of Military and International Law

Class Hours: 3

Lab/Discussion: 1

Credits: 3

The study of the various managerial elements needed to effectively control a military organization and the techniques used to accomplish these functions. Studies in military law and international law prepare the students for their legal responsibilities. Also, see Leadership Laboratory.

MLSC 408 - Seminar in Military Analysis and Management

Class Hours: 3

Lab/Discussion: 1

Credits: 3

Contemporary analysis of use of military in world affairs to include importance of strategic mobility and neutralization of insurgent movements. Selected management problems and situations are presented as they relate to military justice, administration, and obligation and responsibilities of an officer. Also, see Leadership Laboratory.

MLSC 491 - Army ROTC Physical Fitness Development VII

Class Hours: 0

Lab/Discussion: 3

Credits: 1

Prerequisite: MLSC students only

Principles of individual and group physical fitness through the planning and execution of fitness training for all participating students. Primarily hands-on, performance-oriented training. Students are challenged with scheduling and executing PRT programs that ensure their future soldiers and units are prepared to successfully perform their wartime mission. This curriculum instills effective leadership that is essential to the success of future military leaders.

MLSC 492 - Army ROTC Physical Fitness Development VIII

Class Hours: 0

Lab/Discussion: 3

Credits: 1

Prerequisite: MLSC students only

Principles of individual and group physical fitness through the planning and execution of fitness training for all participating students. Primarily hands-on, performance-oriented training. Students are challenged with scheduling and executing PRT programs that ensure their future soldiers and units are prepared to successfully perform their wartime mission. This curriculum instills effective leadership that is essential to the success of future military leaders.

XX --- - Leadership Laboratory (one afternoon per week)

Class Hours: var

Credits: 0

A practical experience for the attainment and application of leadership principles. Concurrently scheduled in conjunction with all Military Science courses, provides for practical challenges in personal accomplishment, both physical and mental, and for development of teamwork and leadership.

XX --- - Summer Camp

Class Hours: var

Credits: 0

Attend a six-week summer camp upon completion of the first year of the Advanced Course. Time at camp is devoted to practical application of principles and theories taught during the preceding school year. While at camp, each student receives lodging, subsistence, uniforms, medical care, reimbursement for travel, and pay in amount of one-half pay of second lieutenant per month.

Music History

MUHI 101 - Introduction to Music

Class Hours: 3

Lab/Discussion: 0

Credits: 3

A broad introduction to the technical, artistic, historical, social, and cultural dimensions of music, drawing on musical traditions from around the world. Students learn to recognize basic ways in which music is put together, communicates meaning to its listeners, and enriches many aspects of life. Through attendance at concerts, students gain familiarity with musical events in their community.

MUHI 102 - Music and Literature Survey

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces students to a broad spectrum of music and literature of various genres through a careful analysis of poetry, fiction, and drama, both in the original format and in a variety of musical settings. Includes music and literature of various time periods, nationalities, and minorities, including works by women and works from non-western musical and literary traditions. Designed for music majors and others who have a substantial knowledge of music, this course fulfills both the liberal studies fine arts and humanities literature requirements for music majors.

MUHI 222 - Music of the British Invasion

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Explores the music, personalities, and cultural and historical influences of the so-called "British Invasion" of popular music to America. Covers groups and individual performers from the UK who made an impact on the American popular music scene from 1964 to 1979. Addresses the pre-invasion scene and the long-term effects of the British Invasion.

MUHI 223 - Musical Cultures from Around the World

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Explores a variety of world cultures through their music. Focuses on music as a product and reflection of culture as well as an aesthetic art form. Introduces the basic elements of music, identifies the musical styles of different cultures, and analyzes how music communicates and reflects cultural

values that enrich the lives of people in these communities. Provides concert attendance opportunities to gain familiarity with musical events in communities and reflect on the role of the individual in these musical cultures.

MUHI 301 - Music History I

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MUHI 102, ENGL 202, and HIST 196 or HIST 197 or HIST 198

Surveys the musicians, cultural settings, aesthetics, musical styles and repertoires of Western Europe from Antiquity to the late 18th century, as well as musical traditions from Asia, Africa, and South America with influence on Western music. Introduces research methods in music history.

MUHI 302 - Music History II

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MUHI 102, ENGL 202, HIST 196 or HIST 197 or HIST 198

Surveys the musicians, cultural settings, aesthetics, musical styles and repertoires of Europe and the United States from the late 18th century to the present, as well as influential musical traditions from Asia and Africa. Develops research writing skills in music history.

MUHI 333 - History of Popular Music Since 1945

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Survey of the musical figures, styles, and cultures of popular music in the US and the UK since 1945.

MUHI 421 - Topics in American Music

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MUHI 301, MUHI 302

Emphasizes reading, discussion, and writing on specialized topics in the history of American music. The topic varies from semester to semester and are announced before registration. Addresses such topics as Art Music in American Culture, Music and the Moving Image, Popular Music, Music and Drama, or Virtuoso Performers in America.

MUHI 425 - 19th-Century Music

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MUHI 301, MUHI 302

Examines the musical and historical aspects of some representative works in four significant repertoires of 19th-century music: songs, characteristic works for piano, opera, and symphonies. Further examines how the works intersect with a number of social, cultural, aesthetic, political, and economic themes that pervade the century, such as the rise of the middle class, city cultures, the domestic music market, the invention of "the folk," nationalism and exoticism, social and political revolutions, idealism and its successors, and the virtuoso.

Music

MUSC 110 - Fundamentals of Theory

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Rudiments of materials; harmonic, melodic, rhythmic, and basic formal procedures of the common practice period including pitch reading, interval construction, scales, and modes.

MUSC 111 - Theory Skills I

Class Hours: 0

Lab/Discussion: 3

Credits: 2

Prerequisite: Music major or instructor permission

Develops aural skills through dictation and interpretation of written music by sight-singing. Taken in conjunction with Theory I.

MUSC 112 - Theory Skills II

Class Hours: 0

Lab/Discussion: 3

Credits: 2

Prerequisite: MUSC 111 with a grade of "C" or better or Satisfactory

Continues development of aural skills through dictation, sight-singing, keyboard skills, and improvisation. Taken in conjunction with Theory II.

MUSC 113 - Theory I Practicum

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Prerequisite: Music major or instructor permission

Reinforces the core concepts of MUSC 115 via recitation, written coursework, guided listening, and musicianship drills. Students who fail the department's undergraduate diagnostic exam must complete MUSC 113 in conjunction with MUSC 115.

MUSC 114 - Analysis of Popular Music

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces active listening and the materials of Western music via contemporary popular repertoire. Covers notation, basic pitch, and rhythm constructs, and analysis with and without score, as well as aspects of songwriting, production, and recording.

MUSC 115 - Theory I

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Music major or instructor permission; concurrent enrollment in MUSC 113 or score of at least 70 percent on the departmental theory placement exam

The study of the harmonic, melodic, and formal devices of the common practice period, from simple diatonic chords through seventh chords.

MUSC 116 - Theory II

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MUSC 115, with a grade of "C" or better or Satisfactory

The study of the harmonic, melodic, and formal devices of the common practice period, from simple diatonic chords through secondary dominants. Introduces basic music forms.

MUSC 120 - Brass Ensemble

Class Hours: 0

Lab/Discussion: 2

Credits: 0/1

Prerequisite: Music major or instructor permission

A chamber ensemble experience for brass performers.

MUSC 121 - Chamber Singers

Class Hours: 0

Lab/Discussion: 3

Credits: 0/1

Prerequisite: Music major or instructor permission

Performs a broad spectrum from early Gregorian chant to contemporary rock cantatas.

MUSC 122 - University Chorale

Class Hours: 0

Lab/Discussion: 3

Credits: 0/1

Prerequisite: Music major or instructor permission

Studies and performs masterworks from the choral literature.

MUSC 123 - Symphony Band

Class Hours: 0

Lab/Discussion: 3

Credits: 0/1

Prerequisite: Music major or instructor permission

A large ensemble experience for woodwind, brass, and percussion performers.

MUSC 124 - Concert Band

Class Hours: 0

Lab/Discussion: 3

Credits: 0/1

A large ensemble experience for woodwind, brass, and percussion performers.

MUSC 125 - Marching Band

Class Hours: 0
Lab/Discussion: 6
Credits: 0/1

No Description

MUSC 126 - Music Theater

Class Hours: 0
Lab/Discussion: 6
Credits: 0/1

Prerequisite: Music major or instructor permission

The study and performance of a wide variety of musical theater venues from opera to Broadway.

MUSC 127 - Percussion Ensemble

Class Hours: 0
Lab/Discussion: 4
Credits: 0/1

Prerequisite: Music major or instructor permission

The student performs pieces ranging from traditional to contemporary, novelty to transcriptions, and marimba ensembles to world music.

MUSC 128 - Opera/Musical in Production Ensemble

Class Hours: 0
Lab/Discussion: 3
Credits: 0/1

Prerequisite: Successful audition and instructor permission

An opportunity with academic credit to make significant contributions to campus opera and musical theater productions, augmenting music course work in the areas of musical training and performance experience for the singer-actor and the pit orchestra musician. Course work consists of rehearsal and performance of a full-length mainstage opera or musical, culminating in four to eight public performances. Singers in the production ensemble learn performance techniques, characterization skill, and physical coordination and freedom of movement on stage. Instrumentalists in the pit orchestra learn performance and ensemble techniques, including challenging reading skills and the ability to interpret a wide variety of musical styles. This is a repeatable course that meets Music Department ensemble requirements.

MUSC 129 - University Symphony Orchestra

Class Hours: 0
Lab/Discussion: 5
Credits: 0/1

Prerequisite: Music major or instructor permission

Provides experience performing standard orchestral repertoire as well as new and unusual works for orchestra.

MUSC 130 - String Ensemble

Class Hours: 0
Lab/Discussion: 2
Credits: 0/1

Prerequisite: Music major or instructor permission

Provides string players an experience with music from Baroque works of Vivaldi, Handel, and Bach to the new and experimental.

MUSC 131 - University Wind Ensemble

Class Hours: 0

Lab/Discussion: 3

Credits: 0/1

Prerequisite: Music major or instructor permission

A large ensemble experience for woodwind, brass, and percussion performers.

MUSC 132 - Treble or Bass Chorus

Class Hours: var

Credits: 0-1

Provides choral ensemble experience for vocalists with treble or bass voices, respectively.

MUSC 133 - Woodwind Ensemble

Class Hours: 0

Lab/Discussion: 2

Credits: 0-1

Prerequisite: Music major or instructor permission

A chamber ensemble experience for woodwind performers.

MUSC 134 - University Chorus

Class Hours: 0

Lab/Discussion: 3

Credits: 0-1

A large, mixed chorus that performs major works each semester.

MUSC 135 - Jazz Ensemble

Class Hours: 0

Lab/Discussion: 3

Credits: 0-1

Prerequisite: Music major or instructor permission

The study and performance of all styles of jazz, including swing, Latin, rock fusion, and other contemporary idioms.

MUSC 136 - Advanced Jazz Ensemble

Class Hours: 0

Lab/Discussion: 3

Credits: 0-1

Prerequisite: Music major or instructor permission

The student performs a mixture of jazz styles from Latin to swing, ballads to fusion.

MUSC 137 - Piano Accompanying

Class Hours: 0
Lab/Discussion: 1
Credits: 0-1

Piano accompanying may be scheduled by qualified (successful audition) pianists from the Music Department in partial fulfillment of ensemble requirements. Pianists registered for this course will provide accompaniments for Music Department students in solo vocal or instrumental performances in area and departmental recitals and/or in voice and instrumental lessons. May be repeated for credit. Registration must be approved by a designated Music Department faculty member from the piano area.

MUSC 138 - Vocal Repertoire Ensemble

Class Hours: 0
Lab/Discussion: 2
Credits: 0-1

Prerequisite: Music major with a successful audition and instructor permission

Explores the performance practices of various styles and genres of classical vocal music, augmenting course work in the areas of applied voice training and performance experience for vocal musicians in a master class format. Features a different vocal style/genre/theme each semester. Course work for the ensemble consists of performance and coaching of assigned music concentrating on historically informed performance practice, as well as composer study and style profiles. Possible topics include Sacred Vocal Music, English Renaissance and Baroque Vocal Music, Vocal Music of Franz Schubert, Vocal Music of the American 20th Century, Vocal Music for the High School Students, etc. This is a repeatable course that meets the Music Department's ensemble requirements.

MUSC 139 - Piano Ensemble

Class Hours: 1
Lab/Discussion: 1
Credits: 1

Prerequisite: Music major, instructor permission

The study and performance of repertoire for piano in ensemble with other pianists, vocalists, and instrumentalists. Special considerations for accompanying and collaborating in chamber music are discussed and practiced.

MUSC 140 - Popular Music Ensemble

Class Hours: 0
Lab/Discussion: 3
Credits: 1

Laboratory for performance and creative expression in all popular musical styles. Includes individual and group projects based their abilities, artistic interests, and the makeup of the ensemble. Some background with songwriting, voice, or a musical instrument is encouraged, but the course is open to any interested student. May be repeated for credit.

MUSC 151 - Class Voice I

Class Hours: 1
Lab/Discussion: 1
Credits: 1

Prerequisite: Music major or instructor permission

For non-voice and music education majors. Development of correct vocal production techniques through individual and group performance in class. Use of the voice as a tool for theory skills and for eventual use in the music classroom.

MUSC 153 - Class Piano I

Class Hours: 1
Lab/Discussion: 1
Credits: 1

Prerequisite: Music major or instructor permission

For music majors with no significant background in piano who need to develop functional keyboard skills. Emphasizes scales, chord progressions, and sight-reading. Harmonizing melodies and playing simple accompaniments are included in this skill-oriented course.

MUSC 154 - Class Piano II

Class Hours: 1
Lab/Discussion: 1
Credits: 1

A continuation of Class Piano I; for music majors.

MUSC 155 - Class Strings I

Class Hours: 1
Lab/Discussion: 1
Credits: 1

Prerequisite: Music major or instructor permission

For music education majors who will develop rudimentary playing techniques sufficient to initiate instruction for beginning students. Emphasizes correct playing positions and tone production for violin, viola, cello, and double bass.

MUSC 157 - Class Percussion I

Class Hours: 1
Lab/Discussion: 1
Credits: 1

Prerequisite: Music major or instructor permission

A practical introduction to the various instruments of the percussion family. Students demonstrate correct playing techniques and develop a resource file containing information on percussion instruments and instructional materials as needed by the school music teacher.

MUSC 159 - Class Brass I

Class Hours: 1
Lab/Discussion: 1
Credits: 1

Prerequisite: Music major or instructor permission

For music education majors who will demonstrate rudimentary playing techniques and tone production skills to initiate beginning instruction. Students develop playing on trumpet or French horn and trombone, euphonium or tuba.

MUSC 161 - Class Woodwinds I

Class Hours: 1
Lab/Discussion: 1
Credits: 1

Prerequisite: Music major or instructor permission

For music education majors who will acquire correct tone production and playing techniques sufficient to initiate beginning instruction. Students demonstrate skills with flute, clarinet, saxophone, and oboe or bassoon.

MUSC 180 - Technology for General Musicianship

Class Hours: 2

Lab/Discussion: 1

Credits: 2

Prerequisite: Music major enrolled in BA or BFA program or instructor permission

An introduction to the fundamental concepts of music technology, including the basics of digital audio sound recording, music notation, MIDI, mixing and sound synthesis, and the construction and use of web pages in a music career.

MUSC 190 - Introduction to Music Education

Class Hours: 1

Lab/Discussion: 1

Credits: 1

Introduces foundational concepts and practices in music education.

MUSC 211 - Theory Skills III

Class Hours: 0

Lab/Discussion: 3

Credits: 2

Prerequisite: MUSC 112, with a grade of "C" or better or Satisfactory

Further development of aural skills through dictation, sight singing, keyboard skills, and improvisation. Taken in conjunction with Theory III.

MUSC 212 - Theory Skills IV

Class Hours: 0

Lab/Discussion: 3

Credits: 2

Prerequisite: MUSC 211 and MUSC 154 or APMU 151, with a grade of "C" or better or Satisfactory

Culmination of the development of aural and keyboard skills including sight-reading, performance, and improvisation. Taken in conjunction with Theory IV.

MUSC 215 - Theory III

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MUSC 115, MUSC 116, with a grade of "C" or better or Satisfactory

An extension of the techniques of the 18th and 19th centuries to include modulation, altered chords, more advanced musical forms, and contrapuntal procedures.

MUSC 216 - Theory IV

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MUSC 115, MUSC 116, MUSC 215, with a grade of "C" or better or Satisfactory

An extension of the techniques of the 18th and 19th centuries to include modulation, altered chords, more advanced musical forms, and contrapuntal procedures. Theory IV concentrates largely on music and materials of the present century.

MUSC 217 - Keyboard Harmony

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MUSC 212, MUSC 216, and the equivalent of a B Jury, or instructor permission

A keyboard approach to understanding harmony observed during the common practice period. Study through the weekly performance and realization of various exercises includes figured bass, score reading (works for small and large orchestra), playing by ear, and applied theoretical analysis. Projects include creating a reduced, four-part score from one movement of a large orchestral work and a transcription of one movement from a large orchestral work.

MUSC 219 - Music Education Practicum Ensemble

Class Hours: var

Credits: 0-1

Prerequisite: At least one of the following must be completed before enrollment: MUSC 151, MUSC 155, MUSC 157, MUSC 159, or MUSC 161, or instructor permission

An opportunity for preservice music teachers or other interested persons to continue to gain experience in a music ensemble setting either in the role of performer or conductor. For music majors or approved non-majors, this is an opportunity for students to gain additional experience as a performer in a low-stress environment. For music education majors who have reached Step 1, this course offers the opportunity for students to gain hands-on experience as an ensemble conductor. Both performers and conductors gain an awareness of age-appropriate student music literature used in public school music programs.

MUSC 240 - Technology in the Music Classroom

Class Hours: 2

Lab/Discussion: 1

Credits: 2

Introduces the technology resources available for use in the music classroom and the instructional technologies appropriate for application in K-12 settings including applications for students with disabilities. Students are exposed to a variety of media and have the opportunity to gain familiarity in their use. Emphasizes the use of the computer in the music classroom, web-based technologies, and music software.

MUSC 281 - Special Topics

Class Hours: var

Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 281 are offered primarily for lower-level undergraduate students.

MUSC 311 - Fundamentals of Conducting

Class Hours: 3

Lab/Discussion: 0

Credits: 2

Prerequisite: Music major or instructor permission

Emphasizes fundamental physical skills of conducting process; various beat patterns are mastered and elementary score reading and interpretation are considered.

MUSC 312 - Choral Conducting

Class Hours: 3

Lab/Discussion: 0

Credits: 2

Prerequisite: MUSC 311

An opportunity to apply basic conducting techniques to choral music. Each student conducts the class in standard choral works. Includes survey of suitable literature, organizational problems, voice testing, rehearsal techniques, program building, interpretation, and diction.

MUSC 313 - Instrumental Conducting

Class Hours: 3

Lab/Discussion: 0

Credits: 2

Prerequisite: MUSC 311

An opportunity to apply basic conducting skills to various instrumental ensembles. Includes a survey of suitable literature, organizational problems, audition procedures, rehearsal techniques, program building, and interpretation.

MUSC 315 - Theory V

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MUSC 216

Many harmonic idioms of past half-century are considered, such as comparative analysis of dissonance; polytonality, polyrhythms; atonalism and 12-tone system; and microtonalism. Original writing in these styles required.

MUSC 331 - Elementary Methods

Class Hours: 2

Lab/Discussion: 1

Credits: 2

Prerequisite: Admission to Step 1 of the 3-Step Process

Familiarizes students with contemporary music education methods for the elementary general music classroom. Includes teaching and learning strategies for developing singing, moving, listening, creating, and playing classroom percussion, recorders, and guitar. Specific focus on child development, characteristics of special learners, curriculum planning, and diverse musical materials. Includes three classroom observations in the field.

MUSC 333 - Instrumental Methods

Class Hours: 2

Lab/Discussion: 1

Credits: 2

Prerequisite: Admission to Step 1 of the 3-Step Process

Familiarizes students with the instrumental music teaching process including traditional and innovative methodology; development of beliefs and values; communication, motivation, and reinforcement; curriculum development, planning, modeling, sequencing, and assessment; recruiting and

retention; teaching techniques for rehearsals for the art of lesson giving and for confronting the main issues of rhythm and intonation; development of aural/visual discrimination skills; improvisation; aptitude tests and testing; classroom control; literature; and equipment.

MUSC 335 - Music for Students with Disabilities in Inclusive Settings

Class Hours: 1

Lab/Discussion: 1

Credits: 1

Prerequisite: Admission to Step 1 of the 3-Step Process

Corequisite: EDUC 242

Develops music education skills, techniques, and materials for students with disabilities and special needs within the music classroom setting. Legal rights of students with special needs are stressed with regard to opportunities to participate in music activities and ensembles. Must be elected concurrently with EDUC 242. Includes field experiences in the music classroom during the EDUC 242 observation period.

MUSC 337 - General/Choral Methods

Class Hours: 2

Lab/Discussion: 1

Credits: 2

Prerequisite: MUSC 212, admission to Step 1 of the 3-Step Process

A pedagogical overview of music methods related to general and choral music curricula for the middle school, junior high school, and high school. Emphasizes the complex factors of adolescent behavior and physiology, administrative issues, performance expectations, and conceptually based learning that influence music teaching at this level.

MUSC 351 - Italian Diction and Literature

Class Hours: 1

Lab/Discussion: 1

Credits: 1

A laboratory course in Italian diction for first-semester voice majors. Meets for two hours per week. Emphasizes pronunciation for the stage and the International Phonetic Alphabet. Students demonstrate skills by singing Italian solo song literature and operatic repertoire of the 17th and 18th centuries.

MUSC 353 - French Diction and Literature

Class Hours: 1

Lab/Discussion: 1

Credits: 1

A laboratory course in French diction for third- or fourth-semester voice majors. Meets for two hours per week. Emphasizes pronunciation for the stage and the International Phonetic Alphabet. Students demonstrate skills by singing French solo song literature and operatic repertoire.

MUSC 354 - German Diction and Literature

Class Hours: 1

Lab/Discussion: 1

Credits: 1

A laboratory course in German diction for second-semester voice majors. Meets for two hours per week. Emphasizes pronunciation for the stage and the International Phonetic Alphabet. Students demonstrate skills by singing German solo and song literature and operatic repertoire.

MUSC 403 - Practicum in String Pedagogy

Class Hours: 1
Lab/Discussion: 0
Credits: 0/1

Prerequisite: FBI, Act 34, and Act 151 clearances, instructor permission

Practical applications of string methods and string pedagogy techniques for instruction in hands-on teaching experiences in individual and ensemble settings. The emphasis is on sequential instruction and reflective assessment of teaching techniques and goals.

MUSC 404 - String Pedagogy

Class Hours: 2
Lab/Discussion: 0
Credits: 2

Prerequisite: Instructor permission

The study of specific techniques of and pedagogical approaches for violin, viola, cello, and double bass in both individual and class situations.

MUSC 405 - Piano Pedagogy

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Junior standing in piano and a piano major or minor

A survey of current and significant past developments in teaching of piano, both privately and in small and large classes. The various piano methods are analyzed, compared, criticized, and adapted to each individual's use.

MUSC 406 - Vocal Pedagogy

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: APMU 255 or instructor permission

Introduces vocal anatomy, the acoustics of singing, and various methods of vocal instruction. Applies pedagogical principles through mock teaching and teaching observation, and students keep a teaching journal.

MUSC 408 - Marching Band Techniques

Class Hours: 2
Lab/Discussion: 0
Credits: 2

Considers building a band show; alignment of ranks and files; development of a standard pace of 5 to 5 and 8 to 5; selection of music; instrumentation; techniques of developing morale; and fundamentals of uniform design.

MUSC 415 - Counterpoint I

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MUSC 216

A study of the contrapuntal style of J. S. Bach and his contemporaries in the late Baroque era, which includes learning the essence of the "species" counterpoint of J. J. Fux and applying it to written exercises based on a given cantus firmus, as well as original compositions in the style of Bach. In

addition to close study of Bach's Two-Part Inventions and of the fugues from the Well-Tempered Clavier, students hear and discuss their exercises and compositions in class so that they may learn from one another.

MUSC 417 - Orchestration

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MUSC 216

All instruments of orchestra are studied from the viewpoint of their contribution to the total sound of ensemble. Ranges and timbres are considered, as well as actual arranging of selected music.

MUSC 418 - Form and Analysis I

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MUSC 216

Thoroughly explores the various forms of Western music through in-depth analyses of representative examples by master composers from Baroque through 20th century. Many genres are introduced, with a special emphasis on string quartet literature.

MUSC 420 - Professional Practices

Class Hours: 2
Lab/Discussion: 0
Credits: 2

Prerequisite: Junior standing

An overview of skills needed to be a successful, versatile, and employable musician in the 21st century, includes curriculum vitae preparation, self-promotion and marketing, finding and creating opportunities, communication skills, grant-writing and resource acquisition, and developing a professional network. Primarily for music majors and taught in a seminar format with guest lectures.

MUSC 475 - Music Lab

Class Hours: var
Credits: 0

All music majors must attend eight on-campus (unless preapproved) recitals and meetings per semester and all departmental recitals, as well as all recitals for their respective performance areas.

MUSC 481 - Special Topics

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: As appropriate to course content

May provide an in-depth study of a narrowly defined area of the discipline. Subject matter changes with repeated offering of the course. May be repeated for credit.

MUSC 493 - Internship in Music

Class Hours: var
Credits: 1-6

For music majors who wish to receive practical experience working with people in music or in areas related to music.

Nuclear Medicine Technology

NMDT 427 - Nuclear Scintigraphy

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Theoretical aspects of nuclear medicine imaging procedures, including applicable pathophysiology, technical aspects for data acquisition, and computer analysis of data. Systemic radionuclide therapy procedures are also discussed.

NMDT 428 - Radiation Physics

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Applicable aspects of nuclear and atomic physics are covered both in theory and mathematical formulae. Theoretical topics include atomic and nuclear structure, radioactive decay, interactions with matter, and radionuclide production methods. Mathematical concepts discussed are the decay equation, equilibrium, and radiation dosimetry.

NMDT 429 - Nuclear Medicine Instrumentation

Class Hours: 2
Lab/Discussion: 1
Credits: 3

Covers the basic principles of both in vitro and in vivo instrumentation. Also covers the design, operation, and quality control of gas detectors and scintillation detectors. Survey equipment, spectrometers, and stationary imaging devices are presented with their application to nuclear medicine. Includes hands-on laboratory experience with single channel analyzers and Anger cameras.

NMDT 430 - Radiation Biology and Radiation Protection

Class Hours: 2
Lab/Discussion: 0
Credits: 2

Topics include ionization and energy transfer; molecules, cellular, tissue, and organ response to radiation; acute and chronic effects of radiation; radiation protection; licensing requirements; recordkeeping; and management of clinical radiation spills.

NMDT 431 - In Vivo/In Vitro Nonimaging

Class Hours: 1
Lab/Discussion: 0
Credits: 1

In vivo clinical nuclear medicine procedures not resulting in images as well as principles of in vitro radioassay are presented. Included are venipuncture, blood volumes, red cell studies, Schillings test, principles of immunology, various types of radioassay, and sensitivity and specificity of procedure.

NMDT 432 - Radiopharmaceuticals

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Topics include tracer theory, pharmacological actions, localization methods, radiopharmaceutical properties, radionuclide generators, radiopharmaceutical preparations and quality control, and transient vs. secular equilibrium. Routinely used radiopharmaceuticals are discussed.

NMDT 433 - Introduction to Tomographic Imaging

Class Hours: 1

Lab/Discussion: 0

Credits: 1

An introduction to the basic principles of cross-sectional anatomy and tomographic imaging is presented. Topics include body planes and cross-sectional anatomy of the heart, brain, liver, and lumbar spine, as applicable to nuclear medicine, and the theory and application of both SPECT and PET imaging systems.

NMDT 434 - Clinical Nuclear Medicine

Class Hours: 0

Lab/Discussion: 40

Credits: 16

Prerequisite: Completion of 77cr at IUP and Phase I at NMI

Student completes 1,320 hours of supervised clinical training at an affiliate hospital. Gives instruction and participates in the performance of various clinical nuclear medicine procedures, patient care, administrative duties, radiopharmaceutical preparation and quality control, equipment quality control, quality assurance, and radiation safety. Develops both technical skills and interpersonal communication skills for incorporation into the medical community and to provide high-quality patient care. Offered on a pass/fail basis only.

Nanomanufacturing Technology

NMTT 311 - Materials, Safety, and Equipment Overview for Nanofabrication

Class Hours: 3

Lab/Discussion: 2

Credits: 3

Corequisite: NMTT 312

Focuses on cleanroom protocol and provides an overview of the materials, safety, and equipment issues encountered in the practice of "top down" and "bottom up" nanofabrication.

NMTT 312 - Basic Nanofabrication Processes

Class Hours: 3

Lab/Discussion: 2

Credits: 3

Corequisite: NMTT 311

A hands-on introduction to the processing sequences involved in "top down," "bottom up," and hybrid nanofabrication. Focuses on a step-by-step description of the processes integration needed to fabricate devices and structures.

NMTT 313 - Thin Films in Nanofabrication

Class Hours: 3
Lab/Discussion: 2
Credits: 3

Corequisite: NMTT 311 and NMTT 312

Provides a detailed understanding of the use and processing of thin film materials in nanofabrication. Emphasizes the understanding and operation of the state-of-the-art deposition and etching processing equipment in the Penn State Nanofabrication Facility cleanrooms.

NMTT 314 - Lithography and Patterning Techniques

Class Hours: 3
Lab/Discussion: 2
Credits: 3

Corequisite: NMTT 311

Provides knowledge and hands-on treatment to all aspects of advanced lithography and pattern generation processes, covering topics from substrate preparation to exposure using pattern transfer equipment such as stamping and embossing, ion and e-beam, and optical contact and stepper.

NMTT 315 - Materials Modifications in Nanofabrication

Class Hours: 3
Lab/Discussion: 2
Credits: 3

Corequisite: NMTT 311

Provides detailed knowledge of the processing steps used in modifying material properties in nanofabrication, including molecular functionalization, cross-linking, metal silicidation, material oxidation, material nitridation, barrier materials, alloying, stress control, annealing, and doping.

NMTT 316 - Characterization, Packaging, and Testing of Nanofabrication Structures

Class Hours: 3
Lab/Discussion: 2
Credits: 3

Corequisite: NMTT 311

Addresses the issues and examines a variety of techniques and measurements essential for testing and controlling the final device fabrication, performance, and packaging.

Nursing

IMAG 101 - Careers in Medical Imaging

Class Hours: 1
Lab/Discussion: 0
Credits: 1

Explores various imaging tracts including Nuclear Medicine Technology, Echocardiography, and Diagnostic Medical Sonography (Ultrasound). Examines the current health care environment and discusses regulatory bodies required for professional credentials. Discusses aspects of culturally centric care. Provides opportunities for effective communication techniques to enhance student-patient interaction.

IMAG 480 - Medical Imaging Seminar

Class Hours: 2
Lab/Discussion: 0
Credits: 2

Prerequisite: Medical Imaging major; Junior standing

Builds on the natural science and liberal studies curriculum. Focuses on fundamental concepts that apply to the practice of medical imaging. Addresses elements of quality and safety in the healthcare environment, interpersonal communication in the workplace, and code of ethics and legal frameworks that impact healthcare decisions.

NURS 101 - Disaster Awareness

Class Hours: 1

Lab/Discussion: 0

Credits: 1

A basic understanding of the essentials of disaster planning, responding to mass casualty incidents, and postdisaster restoration of basic public health. Introduces a basic overview of health issues caused by biological, chemical, explosive, and natural disasters.

NURS 143 - Healthy People—Promoting Wellness

Class Hours: 3

Lab/Discussion: 0

Credits: 3

An introduction to the pathway of health and wellness through contributions to one's environment and community. The interconnectedness of self, others, nature, and society on one's health and wellness is emphasized. Students are guided through decision-making processes regarding life choices to maximize personal well-being. A personal wellness plan that incorporates aspects of physical and social health is developed using the Healthy People framework. Completion of NURS 143 fulfills the Liberal Studies Dimensions of Wellness requirement. Other 143 courses will also fulfill this requirement, and any of these courses may be substituted for each other and may be used interchangeably for D/F repeats but may not be counted for duplicate credit.

NURS 202 - Foundations of Child Health

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Focuses on conditions that affect the health of children. An overview of the structure and function of selected body systems. Emphasizes the development of each system during infancy and childhood. The impact of common acute and chronic diseases on children is incorporated. Health promotion concepts are addressed.

NURS 211 - Fundamentals I Clinical

Class Hours: 0

Lab/Discussion: 3

Credits: 1

Prerequisite: Nursing majors only, BIOL 150 grade of "C" or better; CHEM 101, CHEM 102; sophomore standing; or permission

Corequisite: NURS 212 or permission

Presents concepts and basic nursing skills fundamental to the safe practice of professional nursing. A foundation for students to build their professional knowledge base as well as develop interpersonal and psychomotor skills in a variety of settings with a focus on patient-centered care for adults and older adults.

NURS 212 - Fundamentals I Theory

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Nursing majors only, BIOL 150 grade of "C" or better; CHEM 101, CHEM 102; sophomore standing; or permission

Corequisite: NURS 211 or permission

Introduces students to the nursing discipline, nursing process, professional standards, and values that are foundational to practice. Provides an overview of the various levels of healthcare services and the professional nursing role. Concepts for effective nurse-client relationships are examined including therapeutic communication, evidence-based nursing interventions, quality patient-centered care, and safe nursing practice.

NURS 213 - Fundamentals II Clinical

Class Hours: 0

Lab/Discussion: 3

Credits: 1

Prerequisite: NURS 211, NURS 212 with grades of "C" or better

Corequisite: NURS 214, NURS 236; or permission

Prerequisite or Corequisite: BIOL 240

Builds on the Fundamentals I Clinical course. Opportunities for students to continue to develop professional knowledge and skills with diverse individuals and families in a variety of settings with a focus on adults and older adults. Emphasizes developing the ability to perform comprehensive health assessments, use therapeutic communication, and provide basic nursing skills while promoting safe and quality health care.

NURS 214 - Health Assessment

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: NURS 211, NURS 212 with grades of "C" or better

Corequisite: NURS 213, NURS 236; or permission

Prerequisite or Corequisite: BIOL 240 with a grade of "C" or better

An introduction to basic health assessment for the purpose of determining a client's health status. Students learn to conduct a comprehensive health history and physical assessment on adults and older adults. Incorporates concepts of human anatomy and physiology in the assessment of clients. Identifies appropriate nursing interventions to promote health.

NURS 236 - Fundamentals II Theory

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: NURS 211, NURS 212 with grades of "C" or better

Corequisite: NURS 213, NURS 214; or permission

Prerequisite or Corequisite: BIOL 240 with a grade of "C" or better

Introduces students to fundamental nursing concepts that apply to the practice of professional nursing. Topics include elements of holistic care, promotion of psychosocial and physiologic health, and introduction to medication administration in nursing practice. Provides physiological rationale for nursing interventions with a focus on knowledge and skills to ensure safe delivery of nursing care.

NURS 306 - Problem Solving in Nursing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Opportunities to recognize and develop intervention strategies for problem solving in clinical nursing situations. Emphasizes developing application and analysis skills required for success in the Nursing program.

NURS 311 - Introduction to Nursing Informatics

Class Hours: 2

Lab/Discussion: 0

Credits: 2

Prerequisite: NURS 211, NURS 212, NURS 213, NURS 214, NURS 236

An introduction to basic nursing informatics for the purpose of role development of the emerging contemporary nurse. Incorporates concepts of metastructures and tools used in the workflow process. Examines legislative, cultural, and safety aspects. Discusses current and future applications emerging from the science of informatics.

NURS 312 - Professional Nursing

Class Hours: 2

Lab/Discussion: 0

Credits: 2

Prerequisite: ENGL 202

Corequisite: NURS 330 and NURS 331; or NURS 332 and NURS 333; or NURS 336 and NURS 337; or permission

Examines values, cultural issues, code of ethics, global and national health care policy, regulatory environments, professional standards and legal frameworks that impact health care decisions, determine professional conduct, and guide interactions with clients, families, and health care team members. Utilizes ethical decision-making frameworks to guide professional nursing practice. Focuses on developing the necessary skills to engage in scholarly writings and presentation.

NURS 314 - Health Policy and Law

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Focuses on understanding the evolution of healthcare policy, health law, and federal and state regulation of healthcare financing programs. Introduces healthcare policy making; critical health policy issues; legislative, regulatory, and legal challenges; and legislative and political processes that impact the healthcare delivery system in the United States. (Cross-listed as ELR 314.)

NURS 316 - Evidence-Based Practice in Nursing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: ENGL 202, MATH 217

Corequisite: NURS 330 and NURS 331; or NURS 332 and NURS 333; or NURS 336 and NURS 337; or permission

Focuses on understanding and critiquing nursing research. Emphasizes understanding the research process and utilization of current evidence in nursing practice. Focuses on developing the necessary skills to engage in scholarly writing and presentation.

NURS 330 - Care of the Child and Family

Class Hours: 2

Lab/Discussion: 0

Credits: 2

Prerequisite: FDNT 212, PSYC 215, grades of "C" or better in BIOL 240, BIOL 241, NURS 213, NURS 214, NURS 236; or permission

Corequisite: NURS 331, NURS 312 or NURS 316; or permission

Focuses on knowledge essential to providing nursing care to the child and family. Emphasizes prevention, recognition, implementation of the nursing process, and appropriate interventions for safe care of the child. Applies evidence-based practice for the care of children and families.

NURS 331 - Care of the Child and Family Clinical

Class Hours: 0

Lab/Discussion: 6

Credits: 2

Prerequisite: FDNT 212, PSYC 215, grades of "C" or better in BIOL 240, BIOL 241, NURS 213, NURS 214, NURS 236; or permission

Corequisite: NURS 330, NURS 312 or NURS 316; or permission

Provides students with opportunities to apply the nursing process with children and their families in a variety of settings and demonstrate nursing professionalism in their interactions with individuals, families, and community. Increases students' ability to perform comprehensive health assessments and collaborate with members of the health care team to identify problems, plan, intervene, and evaluate care for children and families. Emphasizes safe, comprehensive, evidence-based nursing care, and professional standards of practice.

NURS 332 - Maternal-Neonatal Health

Class Hours: 2

Lab/Discussion: 0

Credits: 2

Prerequisite: FDNT 212, PSYC 215; grades of "C" or better in BIOL 240, BIOL 241, NURS 213, NURS 214, NURS 236; or permission

Corequisite: NURS 333, NURS 312 or NURS 316; or permission

Focuses on knowledge essential to providing nursing care for pregnant women, neonates, and postpartum patients within a family context. Emphasizes implementation of the nursing process and appropriate interventions for safe care. Applies evidence-based practice for the care of pregnant women, neonates, and postpartum patients.

NURS 333 - Maternal-Neonatal Clinical

Class Hours: 0

Lab/Discussion: 6

Credits: 2

Prerequisite: FDNT 212, PSYC 215; grades of "C" or better in BIOL 240, BIOL 241, NURS 213, NURS 214, NURS 236; or permission

Corequisite: NURS 332, NURS 312 or NURS 316; or permission

Provides students opportunities to apply the nursing process with pregnant women, neonates, postpartum patients, and their families in a variety of settings and demonstrate nursing professionalism in their interactions with individuals, families, and community. Increases students' ability to perform comprehensive health assessments and collaborate with members of the health care team to identify problems, plan, intervene, and evaluate care for pregnant women, neonates, postpartum patients, and their families. Emphasizes safe, patient-centered comprehensive, evidence-based nursing care, and professional standards of practice.

NURS 334 - Transitions in Professional Nursing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite or Corequisite: Prerequisites or Corequisites: ENGL 202, licensed practical nurse

Explores the dynamic nature of health and its impact on the practice of nursing. Nursing theories, concepts, and issues related to nursing practice are analyzed. Linkages among theory, research, and practice are explored for relevance and utility.

NURS 336 - Adult Health I

Class Hours: 4
Lab/Discussion: 0
Credits: 4

Prerequisite: FDNT 212, PSYC 215; grades of "C" or better in BIOL 240, BIOL 241, NURS 213, NURS 214, NURS 236; or permission

Corequisite: NURS 337, NURS 312 or NURS 316; or permission

Introduces the student to disease processes and prevention, collaborative care, and implementation of the nursing process for adults and older adults. Enhances student knowledge regarding assessing human response to changing health and applying the appropriate nursing intervention for safe, patient-centered care. Applies evidence-based practice for the care of adults and older adults.

NURS 337 - Adult Health I Clinical

Class Hours: 0
Lab/Discussion: 15
Credits: 5

Prerequisite: FDNT 212, PSYC 215; grades of "C" or better in BIOL 240, BIOL 241, NURS 213, NURS 214, NURS 236; or permission

Corequisite: NURS 336, NURS 312 or NURS 316; or permission

Provides students with opportunities to apply the nursing process to adults and older adults in a variety of settings and demonstrate nursing professionalism in their interactions with individuals, families, and community. Increases students' ability to perform comprehensive health assessments and collaborate with members of the health care team to identify problems, plan, intervene, and evaluate care for adults and older adults. Emphasizes safe, patient-centered comprehensive, evidence-based nursing care, and professional standards of practice.

NURS 410 - Health Promotion and Social Issues

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: ANTH 211, PHIL 122, SOC 151

An introduction to current social issues, models, and evidence-based research in health promotion, disease prevention, and population health relevant to individuals and communities. Explores individual and population health promotion assessment, health behavior interventions, and disease prevention in diverse populations to improve patient and population health outcomes. Develops and implements an intervention and prevention plan which addresses individual and population health problems. Critiques research and evidence-based practice relevant to population health.

NURS 412 - Nursing Management

Class Hours: 2
Lab/Discussion: 0
Credits: 2

Prerequisite: NURS 312, NURS 316; grades of "C" or better in NURS 330, NURS 331, NURS 332, NURS 333, NURS 336, NURS 337; or permission

Corequisite: NURS 436, NURS 437, NURS 440

Emphasizes leadership, communication and relationship building, knowledge of the health care environment, and resource management. Discusses leadership/management skills and processes. Examines the role of designer/ manager/coordinator of care in professional nursing in depth.

NURS 414 - Health Policy and Patient Advocacy

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Junior standing

Focuses on the legislative, regulatory, political, and advocacy issues including safeguarding autonomy, and promoting the social justice process that impacts the healthcare delivery services in the US. Examines the impact of policy and politics on healthcare, social equity, accessibility, cost, and

affordability. Examines their role in health policy development at the federal, state, and local level. Analyzes selected policies for their effect on social issues, healthcare finance and delivery. Explores the influence of global health.

NURS 431 - Public/Community Nursing Clinical

Class Hours: 0

Lab/Discussion: 6

Credits: 2

Prerequisite: NURS 312, NURS 316; grades of "C" or better in NURS 331, NURS 333, NURS 336, NURS 337; or permission

Corequisite: NURS 434

Prerequisite or Corequisite: NURS 330, NURS 332

Opportunities for clinical practice as a provider of public/community health nursing care for the individual, family, population, and global community and to function as a member of the interprofessional team when working among diverse and/or vulnerable populations. Emphasis is placed on leadership, management, and providing safe, comprehensive, evidence-based nursing care. The effect of health policy on client care is an integral part of the course.

NURS 432 - Psychiatric/Mental Health

Class Hours: 2

Lab/Discussion: 0

Credits: 2

Prerequisite: NURS 312, NURS 316; grades of "C" or better in NURS 331, NURS 333, NURS 336, NURS 337; or permission

Corequisite: NURS 433

Prerequisite or Corequisite: NURS 330, NURS 332

Focuses on the principles, concepts, and best practices that guide nursing practice in a variety of psychiatric/mental health settings. Addresses the role of the nurse in primary, secondary, and tertiary prevention/intervention as it relates to individuals, families, and aggregates with mental health and psychiatric conditions.

NURS 433 - Psychiatric/Mental Health Clinical

Class Hours: 0

Lab/Discussion: 6

Credits: 2

Prerequisite: NURS 312, NURS 316; grades of "C" or better in NURS 331, NURS 333, NURS 336, NURS 337; or permission

Corequisite: NURS 432

Prerequisite or Corequisite: NURS 330, NURS 332

Focuses on opportunities to provide mental health promotion, risk reduction, and disease prevention in a variety of settings and diverse populations. Increases students' ability to perform as a member of inter-professional teams in acute and community-based psychiatric care facilities and to identify personal beliefs and how they impact the therapeutic relationship. Students assimilate evidence-based practice through critical reasoning to apply nursing strategies to assist individuals, families, and groups.

NURS 434 - Public/Community Nursing

Class Hours: 2

Lab/Discussion: 0

Credits: 2

Prerequisite: NURS 312, NURS 316; grades of "C" or better in NURS 331, NURS 333, NURS 336, NURS 337; or permission

Corequisite: NURS 431

Prerequisite or Corequisite: NURS 330, NURS 332

Focuses on public/community health nursing care for the individual, family, population, and global community. Examines the influences of the health care delivery systems and theoretical frameworks applicable to public/community health. Considers the impact of technology, environment, society, and current issues in public/community health nursing.

NURS 436 - Adult Health II

Class Hours: 4

Lab/Discussion: 0

Credits: 4

Prerequisite: NURS 312, NURS 316; grades of "C" or better in NURS 330, NURS 331, NURS 332, NURS 333, NURS 336, NURS 337; or permission

Corequisite: NURS 412, NURS 437, NURS 440; or permission

Focuses on the adult and older adult, family, and community with critical and/or complex health problems and with a patient-centered approach to nursing care. Emphasizes the relationships among clinical manifestations of disease states, treatment, cultural influences, and associated nursing responsibilities. Focuses on utilizing students' knowledge base of diagnostics, pharmacology, interventions, and rehabilitation needs through critical reasoning to plan the care of patients with critical and/or complex health problems. Emphasizes the incorporation of evidence-based practice interventions into nursing practice.

NURS 437 - Adult Health II Clinical

Class Hours: 0

Lab/Discussion: 7.5

Credits: 2.5

Prerequisite: NURS 312, NURS 316; grades of "C" or better in NURS 330, NURS 331, NURS 332, NURS 333, NURS 336, NURS 337; or permission

Corequisite: NURS 412, NURS 436, NURS 440; or permission

Opportunities for clinical practice as a provider of care for critical and/or complex, acutely ill clients in a variety of settings. Places emphasis on leadership, management, and providing safe, comprehensive, evidence-based nursing care. Utilizes patient care technologies, information systems, and communication devices that support safe, patient-centered nursing care.

NURS 440 - Nursing Management Clinical

Class Hours: 0

Lab/Discussion: 7.5

Credits: 2.5

Prerequisite: NURS 312, NURS 316; grades of "C" or better in NURS 330, NURS 331, NURS 332, NURS 333, NURS 336, NURS 337; or permission

Corequisite: NURS 412, NURS 436, NURS 437; or permission

An opportunity for students to incorporate delegation and prioritization skills when caring for multiple patients in an adult health acute care setting. Emphasizes leadership skills and management principles to ensure delivery of high-quality, evidence-based, cost-effective care.

NURS 450 - A Cognitive Approach to Clinical Problem Solving

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: NURS 312, NURS 316; grades of "C" or better in NURS 330, NURS 331, NURS 332, NURS 333, NURS 336, NURS 337; or permission

Corequisite: NURS 431 or NURS 433 or NURS 440 or NURS 437; or permission

Focuses on advanced clinical problem-solving and decision-making skills needed by professional nurses. Factors that influence clinical problem solving are examined to facilitate higher-level thinking in simulated clinical situations.

NURS 455 - Health Care Informatics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Focuses on aspects of acquiring, storing, retrieving, and effectively utilizing health information to support decision making, knowledge, and outcomes. Combines concepts, theory, and practice from the cognitive, computer, and information sciences.

NURS 482 - Independent Study

Class Hours: var

Credits: 1-3

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

Students with interest in independent study of a topic not offered in the curriculum may propose a plan of study in conjunction with a faculty member. Approval is based on academic appropriateness and availability of resources.

NURS 493 - Internship

Class Hours: var

Credits: 1-12

Prerequisite: NURS 236 or licensed practical nurse or registered nurse; 60cr completed; minimum 2.0 GPA

A supervised experience in a practice setting that extends and complements course work in nursing. The types of practice settings may include acute care hospitals, outpatient health centers, and community agencies.

Philosophy

PHIL 100 - Introduction to Philosophy

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Acquaints the beginning student with philosophical problems and methods. Possible topics include the existence of God, human freedom, the scope and limits of human knowledge, the nature of mind, the nature of morality, and the relationship between the individual and the state.

PHIL 101 - Critical Thinking

Class Hours: 3

Lab/Discussion: 0

Credits: 3

An introduction to basic principles of informal logic and critical thinking. An emphasis is on different kinds of arguments, methods of argument evaluation, and the analysis of arguments as they arise in various contexts, such as political debate, advertising, science, law, and ethics.

PHIL 122 - Contemporary Moral Issues

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Examines attempts to answer foundational questions of ethics, including the following: Why should we be moral? What do morally correct actions

have in common? Are there objective moral standards, or are moral codes relative to individual societies? Does morality require religion? Diverse moral theories are applied to contemporary debates and controversies, such as environmental ethics, abortion, capital punishment, affirmative action, and animal rights. Readings will draw on historical and contemporary figures.

PHIL 130 - Introduction to Biomedical Ethics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces ethical issues in medicine and health care, such as patient autonomy and surrogate decision making; death, dying, and end of life care; reproductive ethics; justice and allocation of health care resources; global health, poverty, and development; public health ethics; and ethics of emerging medical technologies.

PHIL 221 - Symbolic Logic I

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces students to the study of formal patterns of good reasoning. Topics include symbolizing English sentences in an artificial language, distinguishing between the semantics and syntax of that language, and learning to test for logical properties and relations using semantic methods (truth-tables, models) and syntactic methods (derivations). Students with an interest in computer science and mathematics will find the material of particular interest and use.

PHIL 223 - Philosophy of Art

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces students to the philosophical investigation of art and aesthetics. Focuses on some of the major problems in the philosophy of art, for example, the definition of art, the nature of works of art, the nature of artistic creativity, the evaluation of works of art, the relationship between art and emotion, and the relationship between aesthetics and ethics.

PHIL 240 - Philosophy and the Good Life

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Examines philosophical attempts to say what it means to live a good life. Is living a good life simply about maximizing the pleasure one experiences? Does a good life require religious faith? Is being virtuous essential to living a good life? Historical thinkers considered may include Plato, Aristotle, Confucius, Laozi, Augustine, Aquinas, Rousseau, Nietzsche, and Russell. Contemporary philosophical work on happiness informed by empirical research may also be considered.

PHIL 270 - Ethics and the Environment

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Applies ethical theory to environmental issues, including resource depletion, animal rights, biotic endangerment, environmental degradation, climate change, and environmental justice. Considers arguments by which human-caused environmental destruction is intrinsically wrong, wrong independently of human interests and purposes, and arguments for environmental policies by which the following are granted rights, interests, or

inherent value: non-human animals, all living things, all natural things, biotic communities, and ecosystems. Also considers arguments that environmental policies cannot be applied globally without injustice to humans, including poor and indigenous peoples.

PHIL 281 - Special Topics

Class Hours: var

Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 281 are offered primarily for lower-level undergraduate students.

PHIL 320 - Ethical Theory

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Examines historical and contemporary work on fundamental issues in ethical theory, with an emphasis on the three major approaches in normative ethics: consequentialism, deontology, and virtue ethics. Also explores select topics in contemporary metaethics, such as the meaning of moral discourse, the possibility of moral knowledge, and the nature of reasons and moral motivation.

PHIL 323 - Political Philosophy

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Through an examination of Ancient, Modern, and contemporary political thought, introduces the key issues of political philosophy: the justification of government authority, the role of the government in the just distribution of wealth in society, the nature of equality, the nature and importance of individual liberty and rights, the connections between race, gender, and political power, and the question of the universal applicability of concepts fundamental to European and American political philosophy in light of increasing globalization.

PHIL 324 - Ancient Greek Philosophy

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Explores the foundations of Western philosophy through examination of important philosophers of the Ancient period, such as the Pre-Socratic philosophers, Socrates, Plato, and Aristotle. Topics may include the nature of the physical universe, Plato's theory of Forms, the nature of happiness, and the possibility of morality. (Titled Ancient Philosophy before 2014-15.)

PHIL 325 - Early Modern European Philosophy

Class Hours: 3

Lab/Discussion: 0

Credits: 3

A study of exemplary philosophical texts from the late 16th through the late 18th century. Figures may include Descartes, Hobbes, Locke, Spinoza, Berkeley, Leibniz, Hume, and Kant. Explores such topics as the nature of matter and mind, the possibility and limits of knowledge, and the emerging scientific challenge to church and ancient authority. (Titled Modern Philosophy before 2014-15.)

PHIL 326 - Existentialism

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Examines existentialism as a philosophical movement, one that rejects both traditional religious and overly reductive, scientific conceptions of human existence. As an alternative, existentialist philosophers share the project of trying to articulate a conception of an authentic, meaningful life outside of the parameters of these approaches. Readings are drawn from major thinkers in this movement, including Søren Kierkegaard, Friedrich Nietzsche, Martin Heidegger, Jean-Paul Sartre, Simone de Beauvoir, and Albert Camus. (Titled Phenomenology and Existentialism before 2014-15.)

PHIL 330 - Philosophy of Science

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Philosophical investigation into the character of empirical scientific thought and practices: measures of confirmation; empirical success; theory ladenness of observation; scientific rationality and the aims of science; the inference from empirical success to truth; the logic of explanation; the character of natural laws; levels of theorizing and intertheoretic reduction; the ideal of objectivity and the place of extra-scientific values in theory appraisal. No special background required.

PHIL 350 - The Human Experience of Time

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Examines philosophical questions about the nature and experience of time. Explores how philosophical views about time are informed by work in different fields, such as anthropology, religious studies, and physics. Questions include whether time is real or an illusion, whether it flows, whether the past, present, and future are equally real, whether time travel is possible, how different cultures think about time and what light that sheds on its true nature. Readings drawn from a wide range of historical and contemporary sources.

PHIL 360 - Philosophy of Mind

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Philosophy major or minor, or junior or senior standing, or instructor permission
Focuses on the mind-body problem. Topics covered may include dualism, logical behaviorism, identity theories, functionalism, various forms of physicalism, mental causation, reductionism, and consciousness.

PHIL 390 - Philosophy of Human Nature

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Examines philosophical theories of human nature, including how traditional philosophical debates about the mind, morality, persons, and freedom are informed by recent empirical work in the cognitive sciences. Topics covered may include philosophical and scientific debates about the innate content and structure of the human mind, moral judgment, the possibility of free will, the extent to which human beings are rational, and the nature of the self and self-knowledge. Connections between conceptions of human nature and political philosophy, as well as bioethical issues concerning enhancement and transhumanism, may also be discussed.

PHIL 420 - Metaphysics

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Explores the nature of reality through investigation of such concepts as substance, cause, freedom, and God. Draws on both historical and contemporary writings. Other topics may include the nature of space and time, the role of language in comprehending reality, the possibility of nonsensory knowledge, and the nature of possibility and necessity.

PHIL 421 - Theory of Knowledge

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Examines various views concerning the nature of knowledge, belief, and justification. Readings drawn from a wide range of historical and contemporary authors. Additional topics may include perceptual knowledge, common sense, skepticism, and the relation between a knower and the community.

PHIL 450 - Philosophy of Law

Class Hours: 3
Lab/Discussion: 0
Credits: 3

An examination of central issues in the philosophy of law, including law and morality, the interpretation of law, and philosophical and legal issues concerning punishment, justice, rights, and liberty. Combines philosophical theory with consideration of selected court cases to develop an understanding of law and its place in society.

PHIL 460 - Philosophy of Language

Class Hours: 3
Lab/Discussion: 0
Credits: 3

An investigation of issues in the philosophy of language and related issues in linguistics (including anthropological linguistics, sociolinguistics, and psycholinguistics). Topics include, for example, the influence of language on perception, rationalist/empiricist perspectives on language acquisition, language and political control, reference, meaning, and truth.

PHIL 481 - Special Topics I

Class Hours: var
Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 481 are primarily for upper-level undergraduate students.

PHIL 483 - Honors Thesis

Class Hours: var
Credits: 1-6

Prerequisite: Admission to departmental honors program; prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

An intensive, focused study involving independent research culminating in a written thesis approved by a thesis director and two faculty readers/committee members. May be taken more than once to a maximum of 6cr.

PHIL 493 - Internship in Philosophy

Class Hours: var

Credits: 3-6

Prerequisite: Permission of the department, junior or senior philosophy major or double major, 2.5 GPA

A supervised experience of no longer than one semester and no less than five weeks. This would take place in either a public or private organization in areas that either extend and develop or complement course work in philosophy. Log and/or major paper required. Internships are to be done with a clear analysis, argumentation, and examination of governing principles.

Physics

PHYS 100 - Prelude to Physics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Students who have earned a "C" or better in a higher number physics course may not take this course.

Prepares students for their first course in quantitative physics by reviewing fundamental concepts involving measurement and error, graphing, motion, and applications of Newton's Laws in developing problem-solving skills. Also presents a historical perspective as well as introduces the many opportunities that exist for those with a background in physics.

PHYS 101 - Energy and Our Environment

Class Hours: 3

Lab/Discussion: 0

Credits: 3

An overview of the areas of energy, transportation, and pollution. These topics are approached via the relevant concepts of physical science and physics. A non-laboratory course for Liberal Studies requirements.

PHYS 105 - The Physics of Light and Sound

Class Hours: 3

Lab/Discussion: 0

Credits: 3

The study of light and sound as applied in the production of objects of art and the production of music. Includes the study of vision, light in nature, photography, and artistic media and the study of hearing, musical sound, musical instruments, and room acoustics. A non-laboratory course for Liberal Studies requirements.

PHYS 111 - Physics I Lecture

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Elementary algebra and trigonometry

General college physics; mechanics, wave motion, and sound.

PHYS 112 - Physics II Lecture

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PHYS 111

Electricity and magnetism, heat, light, atomic and nuclear physics, and an elementary introduction to relativity and quantum theory.

PHYS 121 - Physics I Lab

Class Hours: 0

Lab/Discussion: 3

Credits: 1

Prerequisite or Corequisite: PHYS 111

Physics laboratory at level of Physics I; exercises in mechanics, wave motion, and sound.

PHYS 122 - Physics II Lab

Class Hours: 0

Lab/Discussion: 3

Credits: 1

Prerequisite or Corequisite: PHYS 112

Physics laboratory at level of Physics II; exercises in optics, electricity and magnetism, and radioactivity.

PHYS 131 - Physics I-C Lecture

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 121 or MATH 125, at least concurrently

A calculus-based course in general college physics; topics covered are similar to those covered in PHYS 111 but are treated in more depth through the use of calculus.

PHYS 132 - Physics II-C Lecture

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 122 or MATH 126, at least concurrently

A calculus-based course in general college physics utilizing the techniques in problem solving learned in PHYS 131 applied to more advanced topics; topics covered are: electric fields, magnetic fields, Coulomb's Law, Gauss' Law, Ampere's Law, circuits, geometric optics, and physical optics.

PHYS 141 - Physics I-C Lab

Class Hours: 0

Lab/Discussion: 3

Credits: 1

Prerequisite or Corequisite: PHYS 131

Physics laboratory at same level as Physics I-C; exercises in mechanics, wave motion, and sound.

PHYS 142 - Physics II-C Lab

Class Hours: 0

Lab/Discussion: 3

Credits: 1

Prerequisite or Corequisite: PHYS 132 at least concurrently

Physics laboratory at same level as Physics II; exercises in optics, mechanics, wave motion, and sound.

PHYS 151 - Medical Physics Lecture

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Development of concepts and principles of physics with a strong emphasis as to their use and application in medical and other biophysical areas.

PHYS 161 - Medical Physics Lab

Class Hours: 0

Lab/Discussion: 3

Credits: 1

Corequisite: PHYS 151

Experiments dealing with applications of physical principles to the field of medicine. Practical experience with use of electronic equipment, chart recorders, etc., of type found in modern-day medicine are introduced.

PHYS 231 - Electronics

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: MATH 122 or MATH 126; PHYS 112 or PHYS 132

Circuit theory, transients, transistor circuits, frequency response, input and output impedance, feedback, and electronic noise. Operational amplifiers and digital electronics.

PHYS 260 - Introduction to Nanoscience and Technology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PHYS 112 or PHYS 132

An introduction to the theoretical and experimental concepts of the emerging field of nanotechnology. Prepares students from a wide range of disciplines for careers or higher studies in areas involving nanotechnology. Inherently interdisciplinary in nature, bridges across physics, chemistry, biology, and computer science. Covers the emerging role of nanostructure materials for current and future applications in the fields of electronics, energy, textiles, and medicine.

PHYS 281 - Special Topics

Class Hours: var
Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 281 are offered primarily for lower-level undergraduate students.

PHYS 321 - Introduction to Computational Physics

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Introduces a basic understanding of the methods and tools of computational physics, allowing their use in solving various physics, engineering, and science problems. Emphasizes mastery of software, using it to solve physical problems, and hands-on learning through some trial and error.

PHYS 331 - Modern Physics

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: PHYS 112 or 116 or PHYS 132; MATH 122 or MATH 126

The history of modern physics is covered. Particle and wave properties of matter are explored using the ideas of quantum mechanics. Systems examined using the ideas of quantum and classical mechanics are atomic structure, solid state, and nuclear physics. The special theory of relativity will also be covered. Some of the problems are solved using computers.

PHYS 342 - Thermal and Statistical Physics

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MATH 122 or MATH 126; PHYS 112 or PHYS 132

Thermometry, laws of thermodynamics, low-temperature physics, entropy, properties of ideal gas, and an introduction to statistical mechanics.

PHYS 345 - Optics

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MATH 122 or MATH 126; PHYS 112 or PHYS 132

Geometrical optics and physical optics, including interference, diffraction, and polarization. Quantum optics is introduced.

PHYS 350 - Intermediate Experimental Physics I

Class Hours: 0
Lab/Discussion: 6
Credits: 3

Prerequisite: PHYS 331; PHYS 342 or EOPT 120

Performs required fundamental experiments in areas of mechanics, optics, modern physics, and heat. Speaking before other classmates and faculty and competence in writing scientific papers and reports are emphasized. Effectiveness in the collection of data is important. Computers will often be utilized to perform data taking and analysis.

PHYS 355 - Computer Interfacing

Class Hours: 2

Lab/Discussion: 2

Credits: 3

Prerequisite: COSC 110

Teaches the fundamentals of interfacing the personal computer to its physical surroundings. Teaches how to collect data and to control experiments in real time. Shows how to use digital-to-analog conversion (DAC) techniques and analog-to-digital conversion (ADC) techniques. A graphical software package (such as LabVIEW) is also used to design icon-based interfacing tools, to learn how to use virtual instruments, and to analyze data.

PHYS 401 - Theoretical Physics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PHYS 131, PHYS 132; MATH 125, MATH 126

Prerequisite or Corequisite: MATH 341 or department permission

Explores the applied mathematics necessary to solve ordinary and partial differential equations in closed and series forms for boundary value problems in intermediate and advanced physics. Coordinate transformations, tensor analysis, special functions, and series involving complex variables and integral transforms are also considered.

PHYS 441 - Classical Mechanics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PHYS 131, PHYS 132; MATH 125, MATH 126

Corequisite: MATH 341 or Physics Department permission

Covers vectors, generalized coordinates, and coordinate transformations to study the mechanics of a particle and a system of particles in one, two, and three dimensions. Central forces, planetary, and satellite motion and rotation, oscillations, and conservation laws in the Newtonian formulation of classical mechanics are included and used to solve dynamical problems for various mechanical systems.

PHYS 451 - Electricity and Magnetism

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PHYS 131, PHYS 132; MATH 125, MATH 126

Prerequisite or Corequisite: PHYS 441 or department permission

Treats elements of vector analysis, electrostatics, special techniques for finding electric potential, electric field in matter, magnetostatics, magnetic field in matter, electrodynamics, Maxwell's equations, and electromagnetic waves at the calculus level.

PHYS 461 - Quantum Mechanics I

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PHYS 331, MATH 341

Quantum mechanics following methods of Schrodinger and Heisenberg, application to harmonic oscillator, three-dimensional Schrodinger equation, hydrogen atom, electron in a magnetic field—normal and anomalous Zeeman effect, spin.

PHYS 472 - Nuclear Physics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PHYS 331

A survey of nuclear physics, nuclear size, nuclear mass, reaction theory, types of radioactive decay, nuclear models, nuclear forces, and elementary particles.

PHYS 482 - Independent Study in Physics

Class Hours: var

Credits: 1-6

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

Students with interest in independent study of a topic not offered in the curriculum may propose a plan of study in conjunction with a faculty member. Approval is based on academic appropriateness and availability of resources. Work is supervised by a Physics Department faculty member but does not necessarily involve regular lecture or laboratory hours.

Political Science

PLSC 101 - World Politics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

An analysis of contemporary (post-1945) state system and forces shaping the world in which we live. Student is given a framework within which to analyze contemporary international politics.

PLSC 111 - American Government

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Investigates the way American government works (and why sometimes it doesn't). Examines who gets what, why, and how in America and who pays for it, with an emphasis on understanding the origin, structure, and functions of US government. Looks beyond the divisions between "liberals" and "conservatives" to understand and evaluate contemporary political events and practices. Founding principles and their modern application are a core focus.

PLSC 250 - Public Policy

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Emphasizes dynamics of government as they are evidenced in public opinion, pressure groups, political parties, and our governmental institutions; attention also directed toward the political-economical nexus within American society.

PLSC 251 - State and Local Political Systems

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Examines institutions and processes of state and local governments, with special attention to Pennsylvania; emphasis on the nature of federalism, state constitutions, and role of state and local government in an urban society.

PLSC 260 - Contemporary Political Ideas

Class Hours: 3

Lab/Discussion: 0

Credits: 3

A survey of political ideas influential in contemporary politics, knowledge of which is essential for various analyses in political science. Ideas discussed include conservatism, "liberalism" or social democracy, socialism, anarchism, fascism, political Islam, and feminist and environmentalist thought.

PLSC 270 - Fundamentals of Homeland Security

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Presents fundamental concepts of homeland security and the complexity of this area of government activity and academic study. Explores emergency management and homeland defense, the two main fields of study and practice within homeland security, through a collaborative and integrated foundation involving multiple disciplines of the homeland security enterprise.

PLSC 280 - Comparative Government I: Western Political Systems

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Analyzes Western political systems with emphasis on major contemporary democratic governments of Europe. Analyzes and compares their political cultures, political institutions, and political processes.

PLSC 281 - Special Topics

Class Hours: var

Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 281 are offered primarily for lower-level undergraduate students.

PLSC 282 - International Relations

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Provides a conceptual framework for understanding sovereignty, nationalism, power, security, dispute settlement, and diplomatic, legal, economic, and military relations of nation-states.

PLSC 283 - American Foreign Policy

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Examines formulation and execution of American foreign policy, with attention to governmental institutions, mass media, interest groups, and public opinion; emphasizes contemporary problems.

PLSC 285 - Comparative Government II: Non-Western Political Systems

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Analyzes major non-Western political systems with emphasis on authoritarian and totalitarian systems. Analyzes and compares in a systematic manner their political cultures, political institutions, and political processes.

PLSC 300 - Research Methods in Political Science

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PLSC 101 or PLSC 111

An examination of the application of the scientific approach to the investigation of social and political phenomena. Concentrates on approaches, methods, and computer tools. All political science majors and minors are strongly urged to enroll.

PLSC 339 - Jihad and the Origins of Islamist Movements in the Middle East

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Sophomore standing, 3cr of college history

Discusses the concept of "jihad" in Islamic history: its origins, development, and historical deployment by groups within the Muslim community. Analyzes the history and origins of groups such as al-Qaeda, the Taliban, and ISIS and considers whether these groups are "medieval" or actually modern products of globalization. (Also offered as HIST 339; may not be taken for duplicate credit.)

PLSC 344 - Terrorism

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PLSC 101 or PLSC 111 or CRIM 101 or CRIM 102 or instructor permission

An in-depth study of the legal and international issues that the United States faces in response to combating international terrorism. The emphasis is placed on identifying causes of terrorism and the most plausible threats; terrorist networks, their commonalities and differences, and the difficulty in countering; and determining appropriate responses, to include political and legal implications, threat analysis, physical security, and target hardening. (Also offered as CRIM 344; may not be taken as duplicate credit.)

PLSC 348 - Top Secret America: The Rise and Reach of the National Security State

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Focuses on the historical development of the concept of national security in the US and on the intersection of national and broader international security concerns in the Cold War context. Identifies, for the Cold War era and beyond, diplomatic, military, and intelligence capabilities of governments and explores how individuals and groups conceptualized themselves, and their security. Explores one powerful motivator: fear and how it translated into political actions and citizen involvement in Cold War concepts. HIST 348 and PLSC 348 may be substituted interchangeably for D/F repeats, but may not be used for duplicate credit.

PLSC 350 - The Presidency

Class Hours: 3

Lab/Discussion: 0

Credits: 3

An examination of the office of president, with attention to constitutional foundations, evolution, structure, powers, and functions; some comparisons between presidential and parliamentary systems and between offices of president and governor.

PLSC 351 - Legislative Process

Class Hours: 3

Lab/Discussion: 0

Credits: 3

A functional study of legislative bodies and process of legislation, covering organization of legislative assemblies, operation of committee system, procedures, bill drafting, aides, and controls over legislation.

PLSC 354 - Metropolitan Problems

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Analyzes multiplicity of problems facing our metropolitan areas. Contemporary developments such as urban renewal, shrinking tax base, federal aid to cities, subsidized mass transit, municipal authorities, and political consolidation are examined.

PLSC 355 - Intergovernmental Relations

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Explores characteristics of federal systems of government, with emphasis on theories, origins, institutions, problems in intergovernmental relations in the United States, federal systems in other nations, and trends.

PLSC 358 - Judicial Process

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PLSC 111

Explores nature and limits of judicial power, courts as policymaking bodies, selection of judges, decision process, external forces impinging on the courts, and role of Supreme Court in its relationship with Congress, the presidency, and federalism.

PLSC 359 - Constitutional Law and Civil Liberties

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: PLSC 111

A study of civil liberties and civil rights issues through leading Supreme Court decisions; topics treated include First Amendment rights, procedural due process and the Bill of Rights, and Equal Protection problems in civil rights.

PLSC 360 - Classical Political Thought

Class Hours: 3
Lab/Discussion: 0
Credits: 3

The origins and development of Western thought from Plato and Aristotle through Cicero and Saint Thomas Aquinas. Focuses especially on political participation as a way of life, the unity of political and moral conceptions in premodern political thought, and the relationship between order and justice.

PLSC 361 - Modern Political Thought

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Covers the major representatives of modern political thought since the Renaissance. Follows the development of the specifically modern notion of the state and political action through the works of Machiavelli, Hobbes, Locke, Rousseau, Marx, and Lenin. Emphasizes the "instrumentalist" state and the idea of a political science.

PLSC 370 - The Practice of Public Administration

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Examines the environment and structure of public sector organizations; organizational theory and organizational culture; intergovernmental and intra-organizational relations; leadership and ethics; the planning, management, and evaluation of programs and services; the administration of human resources; budgeting and finance; and management information. Emphasizes the integration of theory and practice through case studies and projects.

PLSC 372 - Constitutional Issues in Homeland Security

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Explores constitutional issues raised by the U.S. government's post-9/11 efforts to battle terrorism abroad and domestically. Analyzes the laws and practices used to protect national security in the context of constitutional principles as articulated in the opinions of the U.S. Supreme Court and other published case law.

PLSC 375 - Crisis Management and Decision Making

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Offers a broader perspective on the nature of crises, particularly international and national security-related crises from the perspective of policy

makers and policy implementers. Examines the ways in which people behave and the decisions they make in crisis situations. Focuses on the ways policy and implementation practitioners can prepare and train for unanticipated events and their consequences. Included as a controlled elective in the Homeland Security major track.

PLSC 382 - Political Systems: Africa

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Suggested PLSC 280 and/or PLSC 285

An intensive, comparative study of the government and politics of a selected region.

PLSC 382-387 - Political Systems

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Suggested PLSC 280 and/or PLSC 285

An intensive, comparative study of the government and politics of a selected region. PLSC 382 Africa (currently inactive); PLSC 383 Asia (currently inactive); PLSC 384 Middle East (currently inactive); PLSC 385 Central and Eastern Europe (currently inactive); PLSC 387 Latin America (currently inactive)

PLSC 383 - Political Systems: Asia

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Suggested PLSC 280 and/or PLSC 285

An intensive, comparative study of the government and politics of a selected region.

PLSC 384 - Political Systems: Middle East

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Suggested PLSC 280 and/or PLSC 285

An intensive, comparative study of the government and politics of a selected region.

PLSC 385 - Political Systems: Central and Eastern Europe

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Suggested PLSC 280 and/or PLSC 285

An intensive, comparative study of the government and politics of a selected region.

PLSC 387 - Political Systems: Latin America

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Suggested PLSC 280 and/or PLSC 285

An intensive, comparative study of the government and politics of a selected region.

PLSC 388 - Dimensions of National Security

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Deals with national security problems including decision making and budgeting, levels of strategy, the utility of force, and the impact of the military on American society.

PLSC 389 - International Development Strategies

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Suggested PLSC 280 and/or PLSC 285

Political characteristics of emerging nations; impact of economic and social change on political structure; evolving patterns of political development; and techniques of nation building.

PLSC 404 - Women and Politics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Focuses on the role of women in political life and policies that especially affect women in both developing and developed countries.

PLSC 405 - Sexuality and Law

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Critically examines the role of law in regulating sexuality in the United States. Analyzes legal and constitutional questions regarding sex, sexual orientation, and identity. Using statutory law and written judicial opinions, the course explores the evolution of legal approaches to issues including regulation of married and non-married sexual activity, same-sex marriage and sexual orientation, and First Amendment protections of LGBT rights. Emphasizes the role of the Supreme Court's interpretation of the Constitution, especially of due process and equal protection.

PLSC 422 - International Law and Organizations

Class Hours: 3

Lab/Discussion: 0

Credits: 3

A survey of the main concepts and history of international law and an analysis of the major international organizations such as the United Nations, European Union, and Organization of American States. Knowledge of how such organizations operate is essential to understand international relations.

PLSC 465 - Intelligence Process and Policy

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Demystifies intelligence and focuses on the critical thinking and intellectual skills the process of intelligence requires to provide government, private, and nonprofit decision makers with useful information on which to base sound decisions. The process involves collecting, analyzing, and providing data to those decision makers. Students also examine the impact of the structure and role of the intelligence community in formulating US national security policy.

PLSC 480 - Political Science Seminar

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Readings and written assignments on a specific topic determined by the instructor in charge.

PLSC 481 - Special Topics

Class Hours: var
Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 481 are primarily for upper-level undergraduate students.

PLSC 482 - Independent Study

Class Hours: var
Credits: 3

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

Students with interest in independent study of a topic not offered in the curriculum may propose a plan of study in conjunction with a faculty member. Approval is based on academic appropriateness and availability of resources.

PLSC 493 - Political Science Internship

Class Hours: var
Credits: 2-12

Prerequisite: 9cr in political science with 2.0 GPA; PLSC 111; approval of internship director and chairperson

Practical experience in government and politics. Log and research project required. Course grade determined by the instructor. Maximum of 6cr applied to minimum in major; maximum of 3cr applied in minor.

Pan-African Studies

PNAF 131 - Introduction to Pan-African Studies

Class Hours: 3
Lab/Discussion: 0
Credits: 3

A multidisciplinary introduction to Africa and the African diaspora. Explores the effects of Africa's history, in particular colonialism and independence, on present-day Africa; examines the relationship between Africa and the African diaspora with special attention to African arts, social systems, and political and economic development; looks at Africa's contribution to contemporary culture in the Americas.

PNAF 482 - Independent Study

Class Hours: var

Credits: 1-3

Prerequisite: Prior approval through advisor, faculty member, program coordinator, dean, and Office of the Provost
Students with interest in an independent study of a Pan-African studies-related topic not offered in the curriculum may propose a plan of study in conjunction with a faculty member. Approval is based on academic appropriateness and availability of resources.

Psychology

PSYC 100 - The Psychology Major: Curriculum and Careers

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Prerequisite: PSYC majors

Acclimates students to the culture and opportunities associated with the study of Psychology at IUP. Emphasizes career options and pathways to success in as a psychology major and the benefits of the discipline to individuals and society.

PSYC 101 - General Psychology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces the scientific study of behavior and mental processes.

PSYC 102 - Identity and Interactions in a Diverse World

Class Hours: 2

Lab/Discussion: 0

Credits: 2

Emphasizes reflection on one's own identity and cultural heritage, and respect for others' intersectional identities and heritage. Experiences and interactions of individuals with dominant and marginalized identities are examined from multiple frameworks.

PSYC 150 - Introduction to Applied Psychology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PSYC 101

Surveys the various settings and professions that require the use and application of psychology and psychological principles to solve human problems. Explores the types of skills required in the applied professions and the clientele served, as well as the theoretical bases for applied work in different contexts.

PSYC 200 - Psychological Research I

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PSYC 101, Grade of "C" or better in MATH 217

Examines the design and analysis of basic experimental and non-experimental research. This course is eligible for course repeat of PSYC 290 (4 credits).

PSYC 215 - Developmental Psychology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PSYC 101

Examines the physical, cognitive, emotional, and social factors that contribute to human development from conception through old age. Provides an overview of theory and research in Developmental Psychology. This course is eligible for course repeat of PSYC 310.

PSYC 225 - Abnormal Psychology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PSYC 101

Examines the description, causes, and treatment of behaviors labeled abnormal in our society from experimental and clinical points of view.

PSYC 235 - Social Psychology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PSYC 101

Examines the effects of the social environment on human behavior. Topics include perception of persons, attitude formation and change, and small-group interaction.

PSYC 245 - Learning and Cognition

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PSYC 101

Examines theories, research methods, and findings related to the study of learning and cognition. Includes conditioning, social learning, memory, perceptual processing, cognition, and language.

PSYC 255 - Biopsychology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PSYC 101

Examines the relationship between behavior and the anatomy and physiology of the nervous system. Emphasizes typical neural function as well as neurological and psychological disorders.

PSYC 280 - Psychological Inquiry

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: PSYC 101, psychology minors

Introduces students minoring in psychology to issues central to carrying out and interpreting empirical research in the field. Students become more sophisticated consumers of empirical research findings. May not be taken for credit after successful completion of PSYC 290.

PSYC 290 - Research Design and Analysis I

Class Hours: 3
Lab/Discussion: 2
Credits: 4

Prerequisite: MATH 217, PSYC 101

A laboratory course devoted to designing, conducting, and evaluating results of psychological experiments.

PSYC 291 - Research Design and Analysis II

Class Hours: 3
Lab/Discussion: 2
Credits: 4

Prerequisite: PSYC 101, grade of "C" or better in PSYC 290

A continuation of Research Design and Analysis I.

PSYC 300 - Psychological Research II: Quantitative Research Methods

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: PSYC 101, Grade of C or better in PSYC 200

Examines advanced quantitative design and analysis in both experimental and nonexperimental contexts. This course is eligible for course repeat of PSYC 291 (4 credits).

PSYC 301 - Psychological Research II: Qualitative Research Methods

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: PSYC 101; Grade of "C" or better in PSYC 200

Examines a variety of qualitative research approaches, taking into account issues of epistemology (ways of knowing), methodology (ways of examining), and representation (ways of writing and reporting).

PSYC 311 - Child Psychology

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: PSYC 101

The study of factors that influence total development and behavior of child. Current theories and research are considered, with focus on optimum development of individual. May receive credit toward the psychology major or minor for only one of PSYC 215, 311, or PSYC 315.

PSYC 312 - Adult Development and Aging

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PSYC 101

A survey of physiological, cognitive, emotional, and social issues affecting the young adult, the middle-aged, and the elderly. Includes an examination of significant adult life crises.

PSYC 313 - Non-normative Development in Adulthood (CAAST)

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PSYC 101

A survey of non-normative transitions for younger, middle-aged, and older adults. Emphasis on how various losses, neurocognitive disorders, abuse, and neglect affect adult development. A component of the interdisciplinary Child and Adult Advocacy Studies (CAAST) minor and certificate programs. May not get credit for both PSYC 312 and 313.

PSYC 314 - Child and Adolescent Psychopathology (CAAST)

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PSYC 101

An in-depth examination of theories and research related to risk factors and protective factors in the development of children and adolescents. Highlights how physical, cognitive, and social development can be impacted by violence. A component of the interdisciplinary Child and Adult Advocacy Studies (CAAST) minor and certificate programs. May not get credit for both PSYC 311 and 314.

PSYC 315 - Experimental Development Psychology

Class Hours: 3

Lab/Discussion: 2

Credits: 4

Prerequisite: PSYC 280 or PSYC 290

Studies human development from conception to death with emphasis on the physical, cognitive, and emotional domains. Students are involved in observation and data collection. May receive credit toward the psychology major or minor for only one of PSYC 215, PSYC 311, or 315.

PSYC 320 - Personality

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PSYC 101

Provides comparative analysis of major representative traditional and contemporary theories of personality.

PSYC 322 - Violence Across the Life Span

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PSYC 101, department permission

A multidisciplinary and contextual approach to understanding interpersonal violence across the lifespan. Emphasizes skill building in mandated reporting, forensic interviewing, documentation of violent incidents, working as a member of a multidisciplinary team, and being an advocate for violence prevention. May be taken for major or minor credit. Includes simulations of forensic interviews that take place outside of class time and that are required aspects. Simulation experiences provide practice carrying out a multidisciplinary approach to forensic investigations.

PSYC 325 - Psychological Testing and Measurement

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PSYC 101

Introduces the principles and methods of psychological measurement and test construction. Reviews major psychological tests currently in use in clinical and business applications.

PSYC 331 - Environmental Psychology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PSYC 101

The study of the relationship between human behavior and its environmental context. Emphasizes the physical environment, both natural and built.

PSYC 332 - Community Psychology and Prevention Science (CAAST)

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PSYC 101 or instructor permission

An introduction to the guiding principles of community psychology with an emphasis on prevention. Employs teamwork and service activities to apply students' new knowledge in addressing social and/or health issues impacting their communities. A component of the Child and Adult Advocacy Studies (CAAST) curriculum.

PSYC 341 - Conditioning and Learning

Class Hours: 3

Lab/Discussion: 2

Credits: 4

Prerequisite: PSYC 101, PSYC 290

An examination of the basic principles of learning and related phenomena; discussion of classical conditioning, discrimination learning, and aversive control of behavior.

PSYC 342 - Human Cognition: Memory and Thinking

Class Hours: 3

Lab/Discussion: 2

Credits: 4

Prerequisite: PSYC 101, PSYC 290

A study of methods and findings in areas of human memory and human information processing. May not receive credit toward the psychology major or minor for both PSYC 342 and PSYC 345.

PSYC 345 - Introduction to Human Cognition

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PSYC 101

An overview of cognitive psychology. The Information Processing Model is contrasted with its predecessor, Behaviorism, and its contemporary challenger, Connectionism. May not receive credit toward the psychology major or minor for both PSYC 342 and 345.

PSYC 350 - Physiological Psychology

Class Hours: 3

Lab/Discussion: 2

Credits: 4

Prerequisite: PSYC 101, PSYC 290

A study of the relationship between behavior and the anatomy and physiology of the nervous system. May not receive credit toward the psychology major or minor for both PSYC 350 and PSYC 356.

PSYC 356 - Biopsychology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PSYC 101

A study of the relationship between behavior and the anatomy and physiology of the nervous system. May not receive credit toward the psychology major or minor for both PSYC 350 and PSYC 356.

PSYC 359 - Sensation and Perception

Class Hours: 3

Lab/Discussion: 2

Credits: 4

Prerequisite: PSYC 290

Introduces the biological and psychological processes that determine our perceptions and their relationships to physical properties of the environment. Laboratory work provides the opportunity to explore lecture and textbook topics firsthand and to collect and analyze psychophysical data.

PSYC 360 - Sensory Perception

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PSYC 101

Introduces the biological and psychological processes that determine our perceptions and their relationships to physical properties of the environment. May receive credit toward the psychology major or minor for only one of PSYC 360 or PSYC 359.

PSYC 372 - Drugs and Behavior

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: PSYC 101, junior standing or permission

A survey of the current knowledge concerning the actions of drugs. Includes legal and social issues surrounding drug use, hazard potential of commonly used drugs, review of current theories and issues regarding the use of drugs in psychotherapy, and consideration of treatment approaches for addiction.

PSYC 374 - Stress and Coping

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: PSYC 101

Fundamental concepts and findings in stress and stress-related disorders. Relationships of stress to disease and methods for coping with stress are presented.

PSYC 377 - Interpersonal Skills and Group Dynamics

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: PSYC 101

Focuses on social/communication skills and behaviors of individuals within groups/teams and across a variety of settings. Integrates psychological concepts and theories of self with the understanding and development of communication skills. Discusses cultural and gender sensitivity, diversity, and ethical concerns in interpersonal interactions.

PSYC 378 - Psychology of Death and Dying

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: PSYC 101

Theories and research which delineate the psychological factors affecting the dying person as well as those persons close to the one who is dying are discussed.

PSYC 379 - Psychology of Human Sexuality

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: PSYC 101

An overview of the psychological issues and research relevant to sexuality with an emphasis on gender roles. Social, psychological, and gender perspectives are used to examine a number of topics, including contemporary sexual attitudes, sexual response, sexual relationships, sexual dysfunction, sexual variations, sexual preference, and sexual violence. Research pertaining to each topic is presented. Students are encouraged to critically evaluate research and theory and to make connections between the material and their personal experience.

PSYC 380 - Gender and Violence

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: PSYC 101

A multidisciplinary approach to understanding interpersonal violence (across the life span) as impacted by gender. Analyzes interpersonal violence from a psychological, gendered, and social construction perspectives. Includes definitions and descriptions of forms of violence. Addresses the interconnections and co-occurrence of violent incidents. Explores the relation of gender to the experience, reaction, and recovery from violence. An analysis of how gender roles contribute to interpersonal violence. Examines approaches to intervention and prevention of violence. Course is a component of the Child and Adult Advocacy Studies (CAAST) curriculum.

PSYC 388 - Forensic Psychology

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: PSYC 101

An examination of current topics at the interface between psychology and the legal system.

PSYC 389 - Psychology of Music

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: PSYC 101

An overview of theory and research on the psychological foundations of music, including music cognition, music perception, and the social psychology of music.

PSYC 390 - Industrial-Organizational Psychology

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MATH 214 or MATH 217, PSYC 101

The study of psychological principles in work organizations; application of psychological theory to the understanding and explanation of individual behavior and experience in work organizations. May not be taken for credit after successful completion of PSYC 425.

PSYC 410 - Historical Trends in Psychology

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: PSYC 101, junior or senior standing or permission

A comprehensive overview of historical antecedents of contemporary psychology with an emphasis on their implications for future developments in the field.

PSYC 411 - Psychology of Women

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: PSYC 101, junior or senior standing or instructor permission

A critical examination of the assumptions about women that are held by the discipline of psychology, considering both current research and individual experience. The psychological effects of socialization on sex role identity, achievement, interpersonal power, mental health, and critical incidents in female development are discussed in the context of relevant concepts from developmental and social psychology.

PSYC 415 - Advanced Topics in Developmental Psychology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grade of "C" or better in PSYC 215 and PSYC 200 or PSYC 280

An advanced forum for a focused investigation of a core area in developmental psychology. As topics will vary, the course may be repeated.

PSYC 435 - Advanced Topics in Social Psychology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grade of "C" or better in PSYC 235 and PSYC 200 or PSYC 280

An advanced forum for a focused investigation of a core area in social psychology. As topics will vary, the course may be repeated.

PSYC 445 - Advanced Topics in Learning and Cognition

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grade of "C" or better in PSYC 245 and PSYC 200 or PSYC 280

An advanced forum for a focused investigation of a core area in learning and cognition. As topics will vary, the course may be repeated.

PSYC 450 - Counseling Skills

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: PSYC 101, PSYC 290, PSYC 225, or instructor permission

Introduces students to the skills necessary to be effective in a mental health service delivery field, as well as the foundational "helping skills" required to form a therapeutic alliance with a client and evidence-based methods of evaluation and treatment.

PSYC 455 - Advanced Topics in Biological Psychology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Grade of "C" or better in PSYC 255 and PSYC 200 or PSYC 280. An advanced forum for a focused investigation of a core area in biopsychology. As topics will vary, the course may be repeated.

An advanced forum for a focused investigation of a core area in biopsychology. As topics will vary, the course may be repeated.

PSYC 460 - Senior Seminar in Psychology

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Psychology Major, Senior level standing (90 or more credits), PSYC 290, or special permission

Culminates students' Psychology major experience with the examination of a topic or problem through the synthesis of content from varied psychological perspectives. Critical thinking and application to big picture questions or real-world issues will be emphasized, as will the development of professional skills including writing, discussion, and presentations.

PSYC 480 - Honors Seminar in Psychology

Class Hours: 3
Lab/Discussion: 0
Credits: 3

A seminar in the graduate tradition with a specialized topic. May be taken more than once to a maximum of 6cr.

PSYC 481 - Special Topics in Psychology

Class Hours: var
Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 481 are offered primarily for upper-level undergraduate students. May be taken more than once to a maximum of 6cr.

PSYC 482 - Independent Study in Psychology

Class Hours: var
Credits: 1-3

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and the Office of the Provost

Individual students pursue their particular interests in psychology in consultation with a member of the staff. May be taken more than once to a maximum of 6cr. Approval is based on academic appropriateness and availability of resources.

PSYC 483 - Honors Thesis

Class Hours: var
Credits: 1-6

Prerequisite: Admission to departmental honors program; prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

An intensive, focused study involving independent research culminating in a written thesis approved by a thesis director and two faculty readers/committee members. May be taken more than once to a maximum of 6cr.

PSYC 493 - Psychological Practicum

Class Hours: var
Credits: 1-12

Prerequisite: PSYC 101, department permission

Under supervision of Psychology Department, selected students receive experience in application of psychological techniques. May be taken more than once to a maximum of 12cr.

Public Health

PUBH 122 - Foundations of Public Health

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Defines public health and its origins and foundations as a field of inquiry. Explains the context of modern public health systems, major approaches to analyzing and understanding human health patterns, and the structure of public health systems in the United States.

PUBH 306 - Research Design and Analysis in Public Health

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: BIOL 301; MATH 216 or MATH 217; PUBH 122

Introduces methodological and ethical research principles in public health. Includes study designs, data collection, human subjects protection, quantitative and qualitative approaches, program evaluation, and community-based participatory research applications. Applies relevant case studies to emphasize research methods used, such as hypothesis generation and testing, study design, data collection and analysis, searching and critically evaluating research literature, identifying strengths and weaknesses of research studies, and drawing conclusions from research evidence.

PUBH 493 - Internship in Public Health

Class Hours: var
Credits: 3-6

Prerequisite: PUBH 122, PUBH 306; BIOL 301; SOC 442; ECON 360; GEOG 316/ RGPL 316; NURS 314/ELR 314; NURS 410, NURS 455; senior status

A capstone opportunity for students to analyze and apply public health theories/models and research into their specific concentrations and experience the role of the public health professional. Consists of weekly one-hour seminar and weekly mentorship experience with public health professional 120-240 hours.

Quantitative/Business

QBUS 215 - Business Statistics

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: MATH 214

Expands on the probabilistic concepts developed in MATH 214 to orient the student toward managerial decision making using quantitative methodologies. Topics include classical regression analysis, forecasting, Bayesian decision theory, linear programming, and simulation.

QBUS 450 - Data Science for Business

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: QBUS 215

An introduction to the practice of data science with a broad set of data analytic skills based on building real analytic applications on a variety of real

data, including big data, unstructured data, and textual data. Skills include accessing and transferring data, applying various analytical frameworks, applying methods from machine learning and data mining, conducting large-scale rigorous evaluations with business goals in mind, and visualizing data analytic results.

Real Estate

REAL 382 - Real Estate Fundamentals

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Acquaints the student with the language, principles, and laws that govern the business of real estate. Emphasizes the underlying concepts of land, property, rights in realty, and the means, methods, and laws that govern the conveyance of these rights. Required course for taking the Pennsylvania Real Estate Sales Exam.

Respiratory Care

RESP 101 - The Profession of Respiratory Care

Class Hours: 1
Lab/Discussion: 0
Credits: 1

Introduces the health care environment and specifically the respiratory care profession. Students visit a hospital respiratory care department and observe basic respiratory patient care procedures.

RESP 326 - Respiratory Care Clinical Practice I

Class Hours: 0
Lab/Discussion: 9
Credits: 3

Prerequisite: Respiratory Care majors; Grades of "C" or better in BIOL 150 and BIOL 240

Corequisite: RESP 328 and RESP 329 and RESP 335

Introduces patient care in the clinical setting on the general floors and in the intensive care unit. Emphasizes the practice of basic respiratory care treatment modalities. Performs patient assessments and evaluates therapy outcomes. Includes sessions of simulated patient clinical training and evaluations as preparation for the hospital experience.

RESP 327 - Pharmacology

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Respiratory Care majors; Grade of "C" or better in RESP 335, or by Program Director permission.

Introduces pharmacology and therapeutics. Emphasizes the medications used in respiratory care. Discusses medication classification, action, usage, dosage, side effects and availability.

RESP 328 - Applied Concepts in Respiratory Care

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Respiratory Care majors

Corequisite: RESP 326 and RESP 329 and RESP 335 or by Program Director permission

Investigates in fine detail the cardiopulmonary anatomy, physiology, cellular structure and function, and neurophysiology. Reviews medical terminology pertaining to respiratory care. Introduces the physiologic assessment of gas exchange via arterial blood gas.

RESP 329 - Respiratory Care Equipment

Class Hours: 4

Lab/Discussion: 0

Credits: 4

Prerequisite: Respiratory Care majors, or by Program Director permission

Corequisite: RESP 326, RESP 328, RESP 335

Introduces respiratory therapy equipment and related procedures. Focuses on the study of medical gas properties, safety systems and pressure-flow relationships. Emphasizes oxygen delivery systems and the rationale for their use. Introduces the principles, techniques and theory of mechanical ventilation. Provides theory of hyperinflation therapies and medication delivery systems. Explores gas laws and mathematics for respiratory care related to the therapeutic delivery of various medical gases and oxygen. Provides problem-solving for equipment difficulties through clinical scenarios.

RESP 333 - Respiratory Care Clinical Practice II

Class Hours: 0

Lab/Discussion: 9

Credits: 3

Prerequisite: RESP 326 and RESP 329; Respiratory Care majors

Corequisite: RESP 327 and RESP 334 and RESP 336

Continues application of treatment procedures introduced in Clinical I, providing greater independence and competence. Broadening the exposure to respiratory care and critical care procedures through specialty rotations. Focuses on mechanical ventilation, pathology, patient safety, and diagnostics.

RESP 334 - Respiratory Care Instrumentation and Application

Class Hours: 4

Lab/Discussion: 0

Credits: 4

Prerequisite: Respiratory Care majors, C or better in RESP 326 and RESP 329, or by Program Director permission

Corequisite: RESP 333 and RESP 336

Provides a comprehensive knowledge of mechanical ventilation. Discusses the care of critically ill and physiologic consequences of mechanical ventilation.

RESP 335 - Patient Care and Emergency Skills

Class Hours: 4

Lab/Discussion: 0

Credits: 4

Prerequisite: Respiratory Care majors or by Program Director permission

Corequisite: RESP 326 and RESP 328 and RESP 329

Introduces the history of respiratory care, the health care team and a variety of procedures. Explores the use of respiratory related medicines. Special emphasis is directed toward medical record extraction, documentation, interpretation and analysis. Techniques of equipment processing, infection prevention and control will be discussed. Analyzes patient vital signs, hemodynamic assessments, ventilator preparation, respiratory care emergency management, artificial airways and airway adjuncts. Examines ethical comportment, advanced directives, and organ recovery.

RESP 336 - Cardiopulmonary Evaluation and Clinical Correlation

Class Hours: 4

Lab/Discussion: 0

Credits: 4

Prerequisite: Respiratory care majors, Grade of "C" or better in RESP 328 or by Program Director permission

Corequisite: RESP 333 and RESP 334

Investigates disease states of the pulmonary and related systems in progression from etiology through treatment and prognosis. Explores bedside patient assessment, ABG diagnostics, and interventions.

RESP 425 - Clinical Case Studies

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Respiratory Care majors; grade of "C" or better in RESP 333, RESP 336 or by Program Director permission

Corequisite: RESP 426

Increases the working knowledge of disease states commonly experienced by patients in the critical care setting. Emphasizes recognition and treatment of various disease states. Explores methods for evaluation and treatment of clinical oxygenation disturbances and acid-base disorders. Clinical simulations, case studies, and patient management problems reviewed and discussed. Emphasizes appropriate information-gathering and decision-making techniques.

RESP 426 - Respiratory Care Clinical Practice III

Class Hours: 0

Lab/Discussion: 12

Credits: 4

Prerequisite: Respiratory Care majors; RESP 327, and RESP 333 and RESP 334 and RESP 336 or by Program Director permission

Corequisite: RESP 425 and RESP 432

Continues respiratory care procedures with an emphasis on improving proficiency and refining skills in adult general and critical care areas. Provides experience in neonatal, pediatrics and non-acute health care settings is included with specialty rotations. Focuses on advanced skills related to mechanical ventilation.

RESP 429 - Respiratory Care Leadership

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Respiratory Care majors; grade of "C" or better in RESP 333, or by Program Director permission

Explores basic leadership and management principles as they apply to the healthcare setting and respiratory care in particular. Emphasizes leadership, professional communications, interactions and resource management in respiratory care and the healthcare environment. Focuses on professional opportunities, professional standards and conduct, leadership opportunities, and the transition from student to practitioner/leader. Includes United States healthcare system construct, regulatory bodies, and regulations for respiratory care. Provides insight into issues impacting respiratory care such as safety, quality, patient satisfaction, human resources and financial management.

RESP 430 - Cardiopulmonary Diagnostics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Respiratory Care majors; Grade of C or better in RESP 329 and RESP 336

Focuses on lung volumes, capacities and measurement. Discusses diagnostic studies, including electrocardiography, equipment and procedures necessary for determining the presence and extent of pulmonary diseases. Examines the causes, recognition and treatment of ECG arrhythmias with interventions and supportive devices. Addresses additional diagnostic methods such as polysomnography, imaging, bronchoscopy and rehabilitative evaluation methods.

RESP 432 - Neonatal and Pediatric Respiratory Care

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Respiratory Care majors, a grade of "C" or better in RESP 334 and RESP 336, or by Program Director permission

Corequisite: RESP 426

Discusses the normal anatomy and physiology, as well as the cardiopulmonary pathologies of neonatal and pediatric patients. Addresses unique differences between the respiratory care of infants and children versus the adult. Focuses on the application of respiratory therapies to neonatal and pediatric populations in the acute care, intensive care and home care venues.

RESP 433 - Respiratory Care Clinical Practice IV

Class Hours: 0

Lab/Discussion: 12

Credits: 4

Prerequisite: Respiratory Care majors; grade of "C" or better in RESP 426 and RESP 425 and RESP 432

Corequisite: RESP 435 or by Program Director permission

Continues respiratory care procedures, with emphasis on greater independence, improving proficiency and refinement of skills in adult general and critical care areas. Includes continued clinical experiences in pediatric, neonatal care, and non-acute health care settings. Provides specialty clinical rotations and opportunities to develop leadership skills.

RESP 435 - Respiratory Care Across the Continuum

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Respiratory Care majors; Grade of "C" or better in RESP 425 and RESP 426 or by Program Director permission

Corequisite: RESP 433

Discusses critical care diagnostic and therapeutic modalities pertinent to respiratory care. Addresses techniques and principles associated with patients in each stage of the continuum of care. Includes management of special populations of patients in acute care, long term care and home care.

RESP 441 - Respiratory Care Professional I

Class Hours: 2

Lab/Discussion: 0

Credits: 2

Prerequisite: Respiratory Care majors; Grade of "C" or better in RESP 333 and RESP 334, or by Program Director permission

Introduces the role of the respiratory therapist as educator and researcher in healthcare and higher education. Focuses on the requirements, roles and responsibilities of the respiratory care therapist. Presents a broad overview and immersion into the research process related to respiratory health.

RESP 451 - Respiratory Care Professional II

Class Hours: 2

Lab/Discussion: 0

Credits: 2

Prerequisite: Respiratory Care majors; grade of "C" or better in RESP 441, or by Program Director permission

Explores advanced aspects of respiratory care education, building on concepts discussed in RESP 441. Focuses on evaluation methods and refining individual professional presentation skills. Emphasizes conducting respiratory care-based research focusing on data gathering and analysis, formulating results, discussion and summarizing a group research project. Culminating in a capstone research project.

RESP 493 - Respiratory Care Internship

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Prerequisite: RESP 326 and RESP 328, and RESP 329, and RESP 335, or by Program Director permission

Provides experience in a supervised practice setting that extends and complements course work in respiratory care. Participants must meet university and sponsoring site requirements. A minimum of 40 hours is required for each credit. May be repeated for a maximum of 5 credits.

Regional Planning

RGPL 103 - Global Cities: Planning and Development

Class Hours: 3

Lab/Discussion: 0

Credits: 3

An introduction to the concepts of cities, world cities, mega-cities, and global cities, and how forces of globalization are shaping contemporary cities in the developed and developing world. Discusses various theories and case studies of global city formation, the urbanization processes and patterns, the growth and development of mega and global cities, and their consequences on physical, economic, social, cultural, and environmental changes and sustainability. Examines critical challenges and issues, such as immigration, poverty, slums, mobility, infrastructure, and climate risks that are relevant for planning are analyzed, and emerging and innovative planning policies and solutions to address these challenges.

RGPL 203 - Planning History

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Examines the history of the planning profession and how the planner's role has evolved over time. Considers the historical context of planning solutions relative to contemporary urban problems by examining the planning tradition from its early antecedents through modern times. Particular attention is directed toward the genesis of planning in the United States during the mid-19th and early 20th centuries. Significant plans, people, projects, and movements in the history of planning are discussed in relation to the evolving traditions of the planning profession.

RGPL 213 - Cartography and Map Design

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces principles of thematic map construction. Emphasizes techniques of choropleth mapping and the production of scientific graphs and charts. (Also offered as GEOG 213; may not be taken for duplicate credit.)

RGPL 232 - Urban Landscapes

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces basic concepts of urban morphology and landscapes including site, situation, function, urban land use, urban structure, and urban hierarchy. Explores relationships between urban structure and urban planning. (Also offered as GEOG 232; may not be taken for duplicate credit.)

RGPL 314 - Map and Photograph Interpretation

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Maps and air photographs, along with remote sensing materials, permit inventory and analysis of geologic, land use, urban development, and other landscape phenomena. The understanding of these materials and of associated tools for their use is presented. (Also offered as GEOG 314; may not be taken for duplicate credit.)

RGPL 316 - Introduction to Geographic Information Systems

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Presents automated methods for creating, maintaining, and analyzing spatial data. Includes (1) specialized GIS hardware and software, (2) vector vs. raster vs. object-oriented spatial data structures, (3) creation and manipulation of geographic data files, (4) database design and management concepts, (5) spatial analysis, and (6) cartographic design. (Also offered as GEOG 316; may not be taken for duplicate credit.)

RGPL 333 - Trade and Transportation

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Deals with the spatial aspects of transportation systems and their use. Discusses circulation, accessibility, time and distance concepts, and trade patterns. (Also offered as GEOG 333; may not be taken for duplicate credit.)

RGPL 341 - Climatology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Examines the elements of weather and climate on earth. The location and causes of global climatic regions are examined in relation to moving pressure and wind systems. Also considers the climatic history of the planet and recent human modifications of the atmospheric environment. (Also offered as GEOG 341; may not be taken for duplicate credit.)

RGPL 342 - Physiography

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Focuses on landform types and their spatial distribution. Emphasizes the tectonic forces that build landforms and the weathering and erosional processes that erode and shape surface features. The relationship between human activities and landforms is also considered. (Also offered as GEOG 342; may not be taken for duplicate credit.)

RGPL 343 - Fresh Water Resources

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Focuses on surface and groundwater as a resource with unique properties. Fresh water is defined physically by storage in the hydrologic cycle and the values assigned by different cultures. Problems featured relate to consumptive and withdrawal water uses, the problems of water supply and scarcity, water law and its inconsistencies, flooding and floodplain management, sources of contamination and pollution, wetlands, and case studies of selected river basins. (Also offered as GEOG 343; may not be taken for duplicate credit.)

RGPL 345 - Biogeography for Environmental Managers

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: One course from GEOG 341, GEOG 342, BIOL 103, BIOL 115

Examines the distribution of plants and animals across the earth's surface, as influenced by natural and human processes. Emphasizes landscape and regional habitat dynamics as they relate to environmental planning and management. Field trips supplement lectures and readings. (Also offered as GEOG 345; may not be taken for duplicate credit.)

RGPL 350 - Introduction to Community Planning

Class Hours: 3
Lab/Discussion: 0
Credits: 3

An introduction to the profession and activity of contemporary American urban and regional planning. Emphasizes land use control, design, growth management, and development regulation. The legal and institutional bases of planning practice are covered as well.

RGPL 352 - Planning Methods

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Research, analytical design, and plan-making techniques in urban and regional planning. Examines basic items necessary to prepare urban and regional comprehensive plans.

RGPL 358 - Planning History and Theory

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: RGPL 350

Provides an overview of the historical development of cities, explores the thinking about urban areas and their evolution over time, and reflects on how both continue to inform the profession of urban planning. Focuses on the social, economic, political, cultural, and technological forces that continually reshape urban form, urban life and urban planning. Examines the evolution of planning theory; major contributors who have influenced the field, current normative, conceptual, methodological issues, and the various roles planners play in practice, and the ethical dilemmas they face.

RGPL 404 - Transportation Planning

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: GEOG 333/RGPL 333 or RGPL 350, or one course from the economic geographer concentration

Introduces the major themes and methods of transportation planning, particularly in an urban context. It is project oriented and supported by readings from the scholarly literature covering themes such as modes of transit, land use implications, and commercial development. Reading assignments are organized topically and coordinated with two workbook projects that develop applied skills. Topics include theory, empirical description, and methodological practice. (Also offered as GEOG 404; may not be taken for duplicate credit.)

RGPL 410 - Community Participation and Civic Engagement Seminar

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: RGPL 350

Introduces recent participatory planning and civic renewal initiatives within "communities of place" in the United States. Particular attention is directed toward understanding how planners, citizens, community-based organizations, and local institutions engage in the public work of civic creativity, asset mobilization, and community development. Participatory planning techniques and community facilitation tools are discussed and demonstrated. Civic associations in Indiana County and southwest Pennsylvania are highlighted as cases.

RGPL 412 - Community Planning Practicum

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: RGPL 352

This senior seminar and workshop constitute a capstone course that focuses on recent research in the major field. Students carry out an applied research project on a topic of local or regional importance. (Also offered as GEOG 498; may not be taken for duplicate credit.)

RGPL 415 - Introduction to Remote Sensing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces concepts, principles, methods, and theories applied in and through remote sensing of the earth's physical and cultural features. Includes understanding the physical principles of the electromagnetic spectrum, the technological underpinnings of a variety of sensors, and applications of these technologies. Applies industry standard software packages in the geospatial sciences to illustrate course concepts and build software recognition and application skills. (Also, offered as GEOG 415; may not be taken for duplicate credit.)

RGPL 424 - Technical Issues in Geographic Information Systems

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: RGPL 316 or 419

Uses project-based approach to develop and maintain a geographic information system (GIS). Designs and implements functional systems through cooperative learning. Covers methods for designing GIS to user specification, data collection, data input, project management, and system documentation. (Also offered as GEOG 424; may not be taken for duplicate credit.)

RGPL 426 - Environmental Land Use Planning

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: RGPL 350 recommended

Reviews and instructs principles, techniques, and applications for the environmental land use planning process. Focuses on surface water and deals with topics such as land use, stream monitoring, stream conservation and restoration, and watershed management. Students who complete the course are exposed to environmental planning legislation and policy, best management practices, and applied techniques.

RGPL 440 - Conservation: Environmental Analysis

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Problems of exploitation and utilization of regional resources such as soils, minerals, forests, and wildlife are considered in relation to population growth and regional planning and development. (Also offered as GEOG 440; may not be taken for duplicate credit.)

RGPL 453 - Planning Design Studio I

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces professional graphic communications. Emphasizes the use of 2-D computer-aided design (CAD) applications, plan graphics, and professional standards to represent and solve basic physical planning problems.

RGPL 454 - Planning Design Studio II

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: RGPL 350, 353 or instructor permission

Introduces the activity of design, design programming, design decision making, and design communications. Focuses specifically on the development of site planning, site analysis, and site design skills as well as the translation of design program elements into physical form.

RGPL 455 - Advanced Remote Sensing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: GEOG 415/RGPL 415

Expands beyond basic principles of remote sensing to understand and apply complex methods of data collection, normalization, and analysis. May cover radiometric normalization, spectral transformations, change detection, object-oriented classification, spatial analysis and filtering, accuracy assessment, and application of learned techniques. A research-intensive experience with a project and paper demonstrating acquired knowledge and application of techniques to a variety of physical and human processes. (Also offered as GEOG 455; may not be taken for duplicate credit).

RGPL 458 - Land Use Law

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: RGPL 350

Introduces principles of land use law. Focus is on federal constitutional principles and key Supreme Court cases, especially as they relate to actions of local units of government and municipal planning practice. Deals with the present state of land use law and with current trends and issues.

RGPL 462 - Planning Policy, Implementation, and Administration

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: RGPL 458

Focuses on the planning and implementation of policies to manage the location, timing, type, and intensity of land development. Explores the multi-step process from community plan to project completion. Exposes students to the public environment in which community plans are developed and implemented and walks them through the real-world problems of identifying projects, building agency and interagency consensus, finding funding, putting together a project plan, project management, personnel, and budget to project completion. (Also offered as GEOG 462; may not be taken for duplicate credit.)

RGPL 468 - Planning Theory

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: RGPL 412

A seminar on contemporary debates concerning planning traditions, principles, and practices. The activity of planning is investigated from several theoretical frames and analytic positions.

RGPL 470 - Housing and Community Development Policy

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Explores a range of issues relating to U.S. housing and community development policy, including the role housing plays in building and strengthening neighborhoods and communities. Covers the structure of housing and related financial markets; the economic and social bases for government to intervene in these markets; and the relative merits and demerits of the different tools available to intervene in these markets including: subsidization, both directly and through the tax system; regulation of financial institutions, e.g. the Community Reinvestment Act; FHA and the government sponsored enterprises of Fannie Mae and Freddie Mac; zoning; and regulation of lands and rents

RGPL 493 - Internship

Class Hours: var

Credits: 1-12

A professional learning experience with emphasis on application of academic background. Open to majors and minors in regional planning with a total of 60cr and 15cr in the major. See internship supervisor for additional information.

Religious Studies

RLST 100 - Introduction to Religion

Class Hours: 3

Lab/Discussion: 0

Credits: 3

An introduction to the academic study of religion through an examination of various dimensions of religious expression and traditions. Covers such

areas as problems about definition of religion; approaches to the study of religion; the goals, language, and rituals of religion; cases of religious experience; faith, disbelief, and alternatives to religion; religion and the sociocultural context.

RLST 110 - World Religions

Class Hours: 3

Lab/Discussion: 0

Credits: 3

A comparative study of the history, teaching, and rituals of the major religions of the world and their influence on contemporary society. This nonsectarian approach to religions emphasizes comparisons/contrasts between Western and non-Western religious traditions as well as the contemporary global nature of Western traditions.

RLST 120 - Comparative Religious Ethics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Examines diversity of thought and practice on selected ethical issues in several major religious traditions. Using a comparative approach, the course will critically analyze similarities and differences within and across religious traditions on particular ethical concerns, such as poverty, violence, and contemporary controversies regarding race, gender and sexuality.

RLST 245 - Women and Religion

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: RLST 110 or instructor permission

Examines women's roles and experiences within some of the world's major religious traditions, both past and present. In exploring patterns and instances of the empowerment and oppression of women, the course pays careful attention to feminist critiques.

RLST 300 - Methodologies of Religious Studies

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Religious Studies major or minor

Introduces students to the theories and methods of the study of religion, including phenomenological, historical, sociological, anthropological, psychological, ecological, feminist, and postmodern approaches. Restricted to majors and minors in Religious Studies.

RLST 311 - Eastern Philosophy

Class Hours: 3

Lab/Discussion: 0

Credits: 3

An examination of texts from East Asia and South Asia that address such philosophical areas as the nature of human knowledge, the nature of reality, and ethics. May include readings from such traditions as Buddhism, Confucianism, Daoism, and/or Hinduism.

RLST 345 - Women in the Bible

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: One religious studies or women and gender studies course or instructor permission
Surveys and examines the stories and issues concerning women in the Bible and introduces the questions and methods of research that the contemporary world and feminist biblical scholars bring to them.

RLST 360 - African Religions

Class Hours: 3
Lab/Discussion: 0
Credits: 3

An examination of the nature of African traditional religion and how traditional religion, Islam, and Christianity coexist and influence one another.

RLST 365 - Native North American Religions

Class Hours: 3
Lab/Discussion: 0
Credits: 3

An introduction to the indigenous religions of North America and to the peoples who practice these rich and varied approaches to the sacred. Not only examines major religious themes and dimensions (myth, ritual, ethics, etc.), but includes a historical perspective on Native North American lifeways. This perspective involves discussion of the clash with Euro-American values and contemporary Native religious responses to social crisis and change. (Also offered as ANTH 365; may not be taken for duplicate credit.)

RLST 370 - Religions: China and Japan

Class Hours: 3
Lab/Discussion: 0
Credits: 3

A study of Daoism, Buddhism, Shinto, and other religious traditions that have played an important role in the histories of China and/or Japan. Considers the various traditions' histories, doctrines, forms of practice, and contemporary expressions.

RLST 374 - Buddhism

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Explores the history, teachings, and practices of the main schools of Buddhism. Considers the tradition both as it has developed in Asia as well as its modifications as it has been introduced into Western societies. (Titled Buddhist Thought and Practices before 2013-2014).

RLST 375 - Religions of India

Class Hours: 3
Lab/Discussion: 0
Credits: 3

A study of Islam including historical and theological foundations, developments of thought, contemporary expressions, and encounters with the modern world.

RLST 378 - Hinduism

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Provides a broad understanding of key developments, concepts, and practices in Hinduism. Includes religious texts, various sects, myths, and rituals. Addresses Hindu politics as tied to diasporic and global communities.

RLST 380 - Islam

Class Hours: 3
Lab/Discussion: 0
Credits: 3

An introduction to and basic survey of the history, beliefs, traditions, institutions, and practices of Islam, with attention to its development and participation in contemporary societies globally.

RLST 385 - Christianity

Class Hours: 3
Lab/Discussion: 0
Credits: 3

A study of the beliefs, practices, significant people, history, and cultural impact of Christianity.

RLST 388 - Interpreting the Bible

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Introduces the sacred writings known as the Bible. Examines the basic contents and major themes of the books of the Bible (Hebrew Bible/Old Testament and New Testament), as well as the goals and methods of the most recent scholarship in biblical studies.

RLST 401 - Topics in Abrahamic Traditions

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Religious Studies major or minor, or permission of the instructor

Examines variable topics within the study of Judaism, Christianity and Islam. Themes vary according to the expertise of the Religious Studies faculty member offering the course. May be repeated.

RLST 402 - Topics in Asian Religions

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Religious Studies major or minor, or permission of the instructor

Offers advanced study of rotating topics in Asian religions. The particular tradition or theme covered varies according to the expertise of the faculty member teaching the course.

RLST 403 - Topics in Indigenous Religions

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: RLST major or minor or permission of the instructor

Offers rotating topics in prehistorical, historical and contemporary indigenous religions by alternating professors in the Department of Religious Studies. Topics may include "Anishnaabeg (Ojibwe) Religion," "Viking Myth and Religion," and "Haitian Vodou."

RLST 480 - Seminar in Religious Studies

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Religious studies students or instructor permission

An advanced forum for detailed exploration of a single topic or single author, subject to instructor's choice. Enrollment limited to religious studies majors and other students by invitation or permission.

RLST 481 - Special Topics I

Class Hours: var
Credits: 3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 481 are offered primarily for upper-level undergraduate students.

RLST 482 - Independent Study

Class Hours: var
Credits: 1-6

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

Individual students wishing to pursue religious studies interests not covered in the department's regular offering may do so by approval. Upon approval, students are guaranteed at least five hours of faculty time per credit. All programs of study must be accepted by the department as a whole. (This option is available to both religious studies majors and nonmajors.) May be taken more than once to maximum of 6cr.

RLST 482 - Independent Study: Honors

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: 3.00 GPA, 15cr in RLST, 3.20 GPA in departmental courses

Majors in religious studies are invited to take 3cr of independent-study-designated Honors Project. Upon satisfactory completion, graduation with departmental honors is possible.

RLST 483 - Honors Thesis

Class Hours: var
Credits: 1-6

Prerequisite: Admission to departmental honors program; prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

An intensive, focused study involving independent research culminating in a written thesis approved by a thesis director and two faculty readers/committee members. May be taken more than once to a maximum of 6cr.

RLST 485 - Selected Topics in Feminist Studies of Religion

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: One religious studies or women and gender studies course or instructor permission

Offers rotating topics in feminist studies in religion by alternating professors in the Department of Religious Studies. Such topics may include "Contemporary Feminist Spirituality Movements," "Goddesses in the Ancient Near East," "Feminist Biblical Scholars and Theologians," and "Women in Buddhism."

RLST 493 - Internship in Religious Studies

Class Hours: var

Credits: 3-12

Prerequisite: Junior or senior; religious studies major or double major; 2.5 GPA in major; department approval

A supervised experience in a public or private organization that extends and complements course work in religious studies.

Safety, Health, and Environmental Applied Sciences

SAFE 100 - The Science of Living Safely

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Non-Safety, Health, and Environmental Applied Sciences

Examines the relevance, impact and role that safety plays in the world today, especially in the workplace. Includes the historical and scientific development of safety and health regulations, the impact of injury on society, identification of hazards and hazard controls in specific industrial processes, and the personal and ethical responsibilities that individuals have for the safety and health protection of themselves, others and their community.

SAFE 101 - Introduction to Occupational Safety and Health

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Non-Safety, Health and Environmental Applied Sciences Major or Minor Examines the relevance, impact and role that safety plays in the world today, especially in the workplace. Includes the historical and scientific development of safety and health regulations, the impact of injury on society, identification of hazards and hazard controls in specific industrial processes, and the personal and ethical responsibilities that individuals have for the safety and health protection of themselves, others and their community.

Introduces the evolution of the safety profession through study of historical events and the changes that resulted. Students gain an understanding of the key components of the profession, such as OSHA and workers' compensation, accident investigation, occupational health hazards, emergency response, product liability, ergonomics, fleet safety, ethics, and measuring safety program success. Case studies and small group activities prepare students for further in-depth study of these topics and to fulfill their roles as professionals.

SAFE 101 - The Science of Living Safely

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Non-Safety, Health and Environmental Applied Sciences

Major or Minor Examines the relevance, impact and role that safety plays in the world today, especially in the workplace. Includes the historical and scientific development of safety and health regulations, the impact of injury on society, identification of hazards and hazard controls in specific industrial processes, and the personal and ethical responsibilities that individuals have for the safety and health protection of themselves, others and their community.

SAFE 104 - Introduction to Safety in the Natural Gas Industry

Class Hours: 3

Lab/Discussion: 0

Credits: 3

An introduction to safety and health issues in the natural gas industry through the study of historical events and the changes that resulted. Students gain an understanding of key safety and health programs for the natural gas industry, such as OSHA compliance and workers' compensation, accident investigation, occupational health hazards, emergency response, ergonomics, fleet safety, ethics, and safety program success measurement. Case studies and small group activities prepare students for further in-depth study of these topics and their roles as safety and health professionals.

SAFE 111 - Principles of Safety I—General Industry

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Stresses an understanding of the complexity of the industrial hazard control problem by thoroughly examining elements of safety and health enumerated in the OSHA-promulgated general industry standards and various consensus standards. Emphasis given to plant layout and design, powered industrial vehicles, boilers and unfired pressure vessels, working and walking surfaces, machine guarding, and an introduction to industrial processes.

SAFE 204 - Principles of Safety in the Natural Gas Industry

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SAFE 104

Examines safety, health, fire, and environmental issues in the natural gas procurement process by showcasing the complexity of hazard control. Uses applicable OSHA-promulgated standards, American Petroleum Institute standards, and various consensus standards as a basis for understanding hazards and their control requirements, such as the use of personal protective equipment. Emphasis is given to well site construction, layout and equipment, and hazards associated with gas procurement construction and operations, such as fall potential, confined spaces, fire and explosion, trenching and excavation, and health hazards. Safety program implementation and interaction with enforcement agencies is also highlighted.

SAFE 211 - Principles of Safety II—Construction Industry

Class Hours: 2

Lab/Discussion: 3

Credits: 3

Prerequisite: SAFE 101; safety, health, and environmental applied sciences majors/minors only or instructor permission

Develops an understanding of hazard recognition, evaluation, prioritization, and control of critical workplace hazards associated with construction. Students are exposed to the complexity of three-dimensional work that exists in the fast-paced construction industry by thoroughly examining elements of safety and health enumerated in the OSHA standards and in various consensus standards. An emphasis is placed on personal protective equipment, electrical safety, scaffolds, fall protection, trenches, and confined space entry including rescue. Practical application of associated hazards and their control strategies is accomplished in laboratory sessions.

SAFE 212 - Hazard Prevention Management I

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SAFE 101; safety, health, and environmental applied sciences majors/minors only or instructor permission

Teaches the fundamental concepts involved in the management of safety programs. Basic safety management terminology, safety professional code of ethics, fleet safety, and product safety are discussed. Also discusses risk management and workers' compensation, as well as workplace violence.

SAFE 215 - Safety, Health, and Environmental Communications

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Sophomore standing; safety, health, and environmental applied sciences majors/minors only or instructor permission

Provides students with the ability to apply the theories of learning and communication to aid them in becoming effective oral and written safety, health, and environmental communicators and trainers. Students design and deliver training programs using modern technology and charismatic engagement tools. Students learn, both in writing and orally, how to use communication skills to convince management and employees to embrace and implement safety initiatives and to communicate with regulators and the public regarding safety, environmental, and health issues. Students develop a range of written documents, such as safety, health, and environmental policies, procedures and/or programs, inspection and audit reports, and program and risk assessment and exposure reports, and then communicate summaries of these documents orally. (writing-intensive course)

SAFE 220 - Hazardous Materials and Emergency Management

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: CHEM 101, SAFE 101, safety, health, and environmental applied sciences majors/minors only or instructor permission

Provides a basic understanding of the storage, transportation, and use of hazardous materials in business. Includes a discussion on hazardous materials, specifically their definitions, categories, properties, regulations, and evaluation. Critical principles of emergency management, including both private and public sector elements, are included.

SAFE 310 - Environmental Safety and Health Regulations and Sustainability

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: CHEM 101 or instructor permission

Provides a working knowledge of federal environmental legislation and its practical application in the work environment. Environmental laws covered include the Clean Water Act; the Clean Air Act; the Resource Conservation and Recovery Act; the Comprehensive Environmental Response, Compensation, and Liability Act; and other related environmental laws. Provides an understanding of the application of sustainability concepts in the work environment.

SAFE 311 - Fire Protection

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: CHEM 101, MATH 105, or instructor permission

Teaches the fundamental concepts involved in the protection of people and property from fire and explosion. Basic fire safety terminology, fire

chemistry and extinguishment, fire safety references and standards, and fire program management are discussed. Also discusses control measures for common fire and explosion hazards and the design of buildings in terms of life safety and fire suppression systems.

SAFE 330 - Recognition, Evaluation, and Control of Occupational Health Hazards I

Class Hours: 3

Lab/Discussion: 3

Credits: 4

Prerequisite: CHEM 101; safety, health, and environmental applied sciences majors only or instructor permission

Prerequisite or Corequisite: BIOL 104 or BIOL 155

Provides an understanding of selected chemical stressors in the workplace that may present occupational health hazards to workers. Students learn to anticipate, identify, evaluate, and control chemical stressors including dusts, mists, metal fumes, airborne fibers, inorganic and organic gases and vapors, and oxygen-deficient atmospheres. Hazard classification systems, adverse health effects from excessive exposures, workplace standards, sampling and analytical methods, and control options are emphasized.

SAFE 331 - Fundamentals of Industrial Hygiene

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Restricted to MS Safety Sciences students only; or by instructor permission only

Provides an understanding of selected chemical, physical, and biological stressors in the workplace that may present occupational health hazards for workers. Focuses on anticipating, identifying, evaluating, and controlling chemical, physical and biological stressors in the workplace. Emphasizes adverse health effects from excessive exposures, workplace standards, sampling and analytical methods, and control options.

SAFE 335 - Industrial and Environmental Stressors

Class Hours: 2

Lab/Discussion: 0

Credits: 2

Prerequisite: BIOL 104 or BIOL 155, CHEM 101

Focuses on understanding and applying safety, regulatory, toxicological, environmental, and epidemiological information, data, and models to determine occupational risk from exposure to common industrial and environmental stressors. Also covers product safety risk from consumer exposure to manufactured products. Case studies act as important means for presenting and discussing information.

SAFE 345 - Process and Systems Safety

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: MATH 105 and SAFE 111 or instructor permission

Focuses on the evaluation of system designs using detailed system analysis techniques. Topics include system definition, economics of systems safety, quantitative and qualitative systems safety methodology, and systems safety/process safety program administration. Skills gained include the ability to perform hardware and human factors systems analysis. Techniques include failure mode and effect analysis, hazard and operability studies, what-if and scenario building, and operating and support hazard analysis. Practical analysis work is accomplished through in-class discussion, demonstration sessions, and homework assignments.

SAFE 346 - Fundamentals of Ergonomics

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Restricted to MS Safety Sciences students only or by instructor permission.

Explores the fundamental principles of human performance and its effect upon the safety and reliability of systems. Examines risk factors in workplace design associated with force, repetition, and posture using anthropometrics, biomechanics of motion, work physiology and human performance. Teaches ergonomic methods that analyze these risk factors.

SAFE 347 - Ergonomics

Class Hours: 2
Lab/Discussion: 3
Credits: 3

Prerequisite: Safety, health, and environmental applied sciences majors only or instructor permission

Prerequisite or Corequisite: BIOL 104 or BIOL 155

Explores the principles that control human performance and its effect on the safety and reliability of systems. Engineering anthropometrics, human perception, biomechanics of motion and work posture, work physiology, and human performance measurement are taught in the context of their application in workplace design. Instructs in methodologies for analysis of tasks and human performance requirements. Important human limitations and ergonomic hazard evaluations, such as lifting and repetitive motion tasks, are studied in laboratory sessions.

SAFE 361 - Air and Water Pollution

Class Hours: 2
Lab/Discussion: 0
Credits: 2

Prerequisite: SAFE 220, or PUBH-ENOC majors, or instructor permission

Focuses on major aspects of industrial air and water pollution management. Includes sources and analysis of industrial air and water pollution, evaluation and control of air and water pollutants, and atmospheric and water chemistry. Particular emphasis is placed on information that is practical for the safety management, industrial health, or environmental health professional.

SAFE 412 - Hazard Prevention Management II

Class Hours: 2
Lab/Discussion: 3
Credits: 3

Prerequisite: SAFE 212

Teaches a systems-based approach to managing safety programs, hazards, and risk. An emphasis is placed on understanding proactive approaches to conducting pre-hazard and life-cycle safety analyses of activities/operations and developing safety system documentation (e.g., policies, objectives, goals, performance measures, plans, committee charters, safety procedures, work procedures, audit plans, and accident investigation reports).

SAFE 430 - Recognition, Evaluation, and Control of Occupational Health Hazards II

Class Hours: 3
Lab/Discussion: 3
Credits: 4

Prerequisite: BIOL 104 or BIOL 155, PHYS 111, or CHEM 101 (for PUBH-ENOC majors), safety, health, and environmental applied sciences majors only or instructor permission

Provides an understanding of selected physical and biological stressors in the workplace that may present occupational health hazards to workers. Students learn to anticipate, identify, evaluate, and control physical and biological stressors in the workplace. Emphasizes adverse health effects from

excessive exposures, workplace standards, sampling and analytical methods, and control options. Concludes with discussions that focus on the effective development and implementation of a comprehensive safety and health program.

SAFE 435 - Ethics and Professionalism

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Prerequisite: Senior standing

Provides a basic understanding of ethics and professionalism related to the occupational safety, health, and environmental profession. Specific topics include the ASSE Code of Ethics, ethical dilemmas that may be experienced in the workplace, expectations regarding professional behavior on internship, and professional growth. Students also learn about safety, health, and environmental professional organizations and certification bodies.

SAFE 488 - Internship

Class Hours: var

Credits: 12

Prerequisite: Senior standing, all required safety sciences courses.

Student conducts a practicum at an approved occupational setting. Student is required to complete four major projects that will be developed in collaboration between the faculty supervisor and the internship supervisor. Student is accountable to an on-site supervisor and required to remain in close contact with a Safety Sciences faculty coordinator.

SAFE 493 - Internship

Class Hours: var

Credits: 6

Prerequisite: Senior standing, all SAFE courses completed.

Applies hazard assessment and management practices to actual workplace safety issues. A two-hour weekly debriefing session involves the students in developing their written and oral communication skills.

Science

SCI 101 - Fundamentals of Physics

Class Hours: 2

Lab/Discussion: 2

Credits: 2.5

Prerequisite: Early Childhood Education or Early Childhood education or Early childhood education/special education major or instructor permission

A conceptual course in physics for the non-science major. High school physics is not a Prerequisite. Class and lab presentations concentrate upon dispelling naive concepts and developing a better understanding and appreciation of the physical world. The topics of motion, heat, light, sound, electricity, magnetism, and the atom are presented in context with our everyday experiences. Does not fulfill the Liberal Studies requirement except for majors for majors in early childhood education or early childhood education/special education major.

SCI 102 - Fundamentals of Chemistry

Class Hours: 2

Lab/Discussion: 2

Credits: 2.5

Prerequisite: Early Childhood Education or Early childhood education/ special education major or instructor permission

Surveys chemical principles and concepts for pre-service early childhood/ special education majors. A variety of chemical concepts is presented, as well as their applications to technology and society. A series of laboratory exercises and projects will allow student to develop inquiry-based activities for the communication of scientific and chemical concepts with the goal of developing scientific literacy.

SCI 103 - Fundamentals of Earth and Space Science

Class Hours: 2

Lab/Discussion: 2

Credits: 2.5

Prerequisite: Early childhood education and early childhood education/special education majors

Earth science course for early childhood education/special education (ECSP) majors. Introduces concepts and applications of astronomy, geology, oceanography, and meteorology. Includes both lecture and laboratory components with an emphasis on how the earth sciences impact the natural environment. Does not fulfill the Liberal Studies requirement except for majors in early childhood education/special education major.

SCI 104 - Fundamentals of Environmental Biology

Class Hours: 2

Lab/Discussion: 2

Credits: 2.5

Prerequisite: Early Childhood Education/Special Education major or Early Childhood Education major

Introduces the major concepts and principles of ecology and their application to modern living. Includes lecture and laboratory components with an emphasis on the content and processes of science. Laboratory exercises reinforce lecture topics as well as the use of laboratory equipment, measuring procedures, experimental design, and the organization, visual representation, and analysis of data.

SCI 105 - Physical Science I

Class Hours: 3

Lab/Discussion: 2

Credits: 4

A descriptive and conceptual course in physics for the non-science major. High school physics is not a Prerequisite. Content is designed to develop an understanding and appreciation of the physical world around us, to produce changes in attitude and background essential for our modern society, and to clarify the following topics: motion, heat, sound, light, electricity, magnetism, and the structure of matter.

SCI 107 - Chemistry for Everyone

Class Hours: 3

Lab/Discussion: 0

Credits: 3

A basic course in chemistry for the non-science major. High school chemistry is not a Prerequisite. The students develop an understanding and appreciation of the process of science and of the significance of chemistry in everyday life. In addition to basic chemical principles, consumer topics, such as batteries, nuclear chemistry, chemistry of living systems, air, water, energy, and food additives, are covered.

SCI 113 - Physics in Science Fiction

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Explores the use and abuse of physics in science fiction. Discusses staples of science fiction including time travel, faster-than-light speed travel, quantum mechanics and artificial gravity. Examines the agreement between phenomena presented in fiction and our current model of the universe. Reviews popular, current science fiction franchises as well as classical science fiction.

SCI 117 - Chemistry for Everyone Laboratory

Class Hours: 0

Lab/Discussion: 2

Credits: 1

Prerequisite: Must be taken after or concurrent with SCI 107

A basic laboratory course in chemistry for the non-science major. Laboratory exercises are for the students to develop an understanding and appreciation of the process of science and of the significance of chemistry in everyday life. These laboratory exercises will demonstrate basic chemical principles and will include consumer topics, such as acids and bases, nuclear chemistry, water hardness, and food additives.

Sociology

SOC 151 - Principles of Sociology

Class Hours: 3

Lab/Discussion: 0

Credits: 3

A scientific study of the structure of human societies and the behavior of individual people, groups, institutions, processes, and interactions. Examines the relationship between individuals and societal institutions, processes, and interactions. Provides an overview of the discipline including key concepts, main theoretical perspectives, the methods and research findings of sociologists, and social inequalities. Meets Social Science requirement for Liberal Studies. SOC 151 and SOC 161 cannot be substituted interchangeably for D/F repeats.

SOC 161 - Foundations of Sociology: Social Relations in Groups and Organizations

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Studies the structure of human societies and the behavior of individual people, groups, and teams in society. Examines the relationship between individual and societal institutions, processes, and interactions with emphasis on the ways power/status are reflected. Explores the relationship between individual identity and team dynamics as it pertains to race, gender, class, sexuality, ability, and age while relating to the methods and research findings of sociologists. Applies decision making and problem solving as members of small teams work to achieve a shared objective within a larger organizational context. For those seeking a minor in Professional Teamwork and Leadership. Meets Social Science and Global and Multicultural Awareness requirements for Liberal Studies. SOC 151 and 161 cannot be substituted interchangeably for D/F repeats.

SOC 231 - Contemporary Social Problems

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Using a sociological perspective, this course will examine pressing social problems as they relate to race, class, and gender in contemporary American society. Such problems may include various issues such as poverty, delinquency, substance abuse, crime, divorce, and others. These issues are considered through multiple lenses, including historical, economic, and social, with connections to current social policy.

SOC 251 - Sociology of Human Sexuality

Class Hours: 3

Lab/Discussion: 0

Credits: 3

An in-depth analysis of a formerly taboo topic, human sexuality. Current information from biological, psychological, and sociological research on human relationships is presented to provide a foundation for self-understanding and societal values.

SOC 269 - Sociology of Deviance

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SOC 151 or SOC 161 or instructor permission

An overview of the sociological study of deviance. Begins with examining the nature and meaning of deviance or how society creates deviance as social and legal constructions and identifies specific human behaviors as types or forms of deviance. Also examines the major theories or multi-causal explanations of why such deviance occurs. Further describes how society, especially its social institutions and agents, attempts to control or suppress such deviance. Social policy implications of such societal reactions are also considered.

SOC 281 - Special Topics

Class Hours: var

Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 281 are offered primarily for lower-level undergraduate students.

SOC 300 - Skills for Using Sociology in Your Career and Community

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SOC 151 or SOC 231

Develops a variety of skills that sociologists bring to the workplace, including research literacy, application of theory and research, and professional writing. Explores the wide range of careers and other endeavors to which these skills may be applied. Utilizes concrete activities and practical use of knowledge and skills that will aid in future coursework, and in making valuable contributions to organizations in the public, private, and nonprofit sectors.

SOC 314 - Sociology of Native Americans

Class Hours: 3

Lab/Discussion: 0

Credits: 3

An introduction to the history, "traditional" cultures, and changes brought by European settlement and American conquest and the range of social issues faced by contemporary Native Americans on and off reservations. A special emphasis is placed on the efforts of indigenous Indian societies to maintain and regain access to land and other resources. Activist responses are considered along with the social consequences of past and present initiatives and policies.

SOC 320 - Sociological Theory

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SOC 151 or SOC 161; second-semester sophomore standing

A detailed survey of the historical development of sociological theory from the mid-19th century to the present. Treats the classical theorists Marx,

Durkheim, and Weber and such contemporary theoretical schools as functionalism, Marxian, and Weberian conflict theory, cultural materialism, social evolutionism, rational choice theory, symbolic interaction, ethnomethodology, sociobiology, structuralism, and postmodernism. Students are encouraged to take this course in the second semester of their sophomore year or during their junior year.

SOC 333 - Delinquency and Youth

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: SOC 151 or SOC 161

A study of social and cultural factors involved in various youth lifestyles, including delinquency. Cross-cultural and historical approach used in a review of social norms, social control, and socialization institutions and community-based programs for rehabilitation.

SOC 335 - Alcohol and Drug Abuse

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: SOC 151

Examines the social issues and problems of alcohol and drug misuse in American society. Legal and illegal substances are considered, and the causes of substance abuse as well as alternatives are examined.

SOC 336 - Sociology of the Family

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: SOC 151 or SOC 161

A study of family dynamics and patterns using sociological research methods and theories. Examines social, cultural, and historical changes that have altered the nature of family life and created challenges for public policy. Addresses contemporary problems and issues encountered by families and approaches to dealing with these problems.

SOC 337 - Society, Globalization, and Risk

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: One of the following: ANTH 110, ECON 101, ECON 121, GEOG 230, HIST 202, PLSC 101, PLSC 282, SOC 151, SOC 161

Examines the factors driving globalization, and the risks associated with globalization, on both a local and international level. Foundations for thinking in global terms are provided through an overview of historical developments and major international actors that have shaped current global society. Focuses on major challenges and risks facing global society. Throughout, students are encouraged to connect their own personal life experiences to the broader global context. (Titled World Societies and World Systems before 2014-15.)

SOC 345 - Interpersonal Dynamics

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: SOC 151 or SOC 161

A study of the interaction between and among individuals and groups in various social settings. Emphasizes self-understanding, small groups, socialization, social influence and compliance, person perception, collective behavior, and mass communication.

SOC 348 - Sociology of Work

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SOC 151 or SOC 161

Focuses upon the sociological examination of the various forms of labor, employment, and unemployment present in industrial societies. Examines the nature of work and unemployment in the modern era and how these forms are being transformed in the present period.

SOC 352 - Sociology of Religion

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SOC 151 or SOC 161

Nature, role, and function of religious phenomena in human societies are explored with special attention to certain critical issues as they relate to religion and politics and religion and economics. Examines some fundamental modes of religious life, including ritual forms and mythic expressions. Includes other themes such as revitalization movements and processes of secularization in modern societies.

SOC 357 - Sociology of Aging and the Life-course

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SOC 151 or SOC 161

An introduction to the various problems faced in the process of growing older including ageism, social support, elder abuse, financial exploitation, etc. Attitudes of society toward the elderly and the social and cultural impact of an aging US population are examined

SOC 361 - Social Stratification

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SOC 151 or SOC 161

Examines leading perspectives in the major sociological subfield of social stratification. Attention drawn to different ways of ranking people in human societies, issues concerning the distribution of income and wealth, the role of political power in determining who gets what, and the causes and consequences of social inequality for specific groups.

SOC 362 - Racial and Ethnic Minorities

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SOC 151 or SOC 161

Examines from a historical and comparative perspective the experiences of minority groups, with special emphasis on economic and political domination, stereotyping, prejudice, and discrimination. Techniques of majority group domination and the responses of minority groups are discussed. Various reasons for the different rates and patterns of assimilation are explored.

SOC 363 - Sociology of Gender

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SOC 151 or SOC 161

Explores current perspectives on the situations faced by women and men primarily in the United States. Examines issues such as the impact of sex and gender on socialization, the construction of knowledge, intimate relationships, paid work, family relationships, health, and issues of change.

SOC 387 - Social and Cultural Change

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SOC 151 or SOC 161

An exploration of current theoretical perspectives on social and cultural change. Special attention given to planned change at the local or regional level.

SOC 391 - Foundations of Sociological Practice

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SOC 151 or SOC 161

Develops an understanding of how to use micro and macro sociological theory to analyze, assess, and diagnose human problems. Employing case studies, prepares students to do casework and to help solve interpersonal, group, and organizational problems. Also seeks to acquaint students with the broader professional activity of human services. Recommended Prerequisite/corequisite SOC 320.

SOC 392 - Clinical Sociological Practice

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SOC 391

Prepares the student to effect constructive change within individuals, groups, families, and communities. Draws its analysis, diagnosis, and methods from the foundations of sociological theory at the level of intervention with clients. It is strongly recommended that students have at least 6 SOC credits in their specialized area before taking SOC 392 other than SOC 151, SOC 320, SOC 460, and SOC 461.

SOC 410 - Men and Masculinities

Class Hours: 3

Lab/Discussion: 01

Credits: 3

Prerequisite: SOC 151 or SOC 161 or instructor permission

Explores constructs of masculinity within the context of US culture using a sociological lens. Examines the notion that there are multiple masculinities that intersect with a range of areas including race, ethnicity, class, sexuality, and gender identity. Evaluates the influence of social contexts and roles on behavioral expectations for men and boys. Analyzes implications for society and individual men.

SOC 417 - Global Service Learning

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: SOC 151 or SOC 161 or instructor permission

A forum for critical reflection on community-driven service, cross-cultural experiences, and global citizenship. Progresses through a framework, which explicitly links personal experience and readings with regular writing assignments in a journal and class discussion. Reflects on both the purposes of their service work as well as on its limits as a response to specific needs within the community, and more general problems of social justice. Through the experience of interaction and reflection, students learn to apply knowledge and skills in the real world, exercise critical thinking, develop self-learning and helping skills, develop societal knowledge and sensitivity, and enhance personal development. Explores issues of social responsibility and citizenship in relation to the social problems with which they become acquainted through their community work.

SOC 421 - Sociology of Mass Media

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: SOC 151 or SOC 161

Examines the development of mass media as dominant cultural forms within advanced industrial societies in the 21st century. Emphasizes critical understanding of the sociohistorical development, the underlying assumptions, and the social implications of the advance of mass media.

SOC 427 - Social Perspectives on Intimate Partner Violence

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: SOC 151 or SOC 161 and Junior standing or permission of instructor.

Considers the range of theoretical explanations from a social perspective for the pervasive violence between intimate partners. Particularly examines the research on intimate partner violence and the implications of this research for programs and policies assisting both the victim and the abuser.

SOC 428 - Child Abuse

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: SOC 151 or SOC 161 and Junior standing or permission of instructor

Examines the prevalence, causes, and social implications of physical, sexual, emotional, and neglect forms of child abuse in society. Child abuse is studied from the individual, family, and societal-level perspectives. Potential intervention strategies will also be considered.

SOC 442 - Medical Sociology

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: SOC 151 or SOC 161

A review of medical sociology. Focuses on the sociological examination of health, illness, and healing; health inequalities; medicalization; medicine as a profession; healing occupations; interactions within medical settings; the social organization of health services; and bioethics. Examines current, major issues in public policy and healing. (Offered as SOC 342 prior to 2015-16.)

SOC 448 - Social Welfare Policy

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: SOC 151 or SOC 161

Focuses on the formation of social welfare programs in the United States, current social policy issues, and debates between conservative, liberal, and social democratic policy analysts. Special attention drawn to various social problems and a range of social policies designed to ameliorate the economic disadvantages of single individuals, single parents, and two-parent families. Also devoted to understanding the relationship between social policy, research, and implementation.

SOC 450 - Health Disparities

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: SOC 151 or ANTH 211 or instructor permission

Explores health status and healthcare disparities across groups based on race/ethnicity, gender, socioeconomic status/social class, nativity, refugee and citizen status, and other cultural and demographic characteristics. Uses a social determinants of health perspective to consider how social, cultural, environmental, political, and economic conditions produce unequal and inequitable health outcomes, with special focus on disadvantaged populations. Addresses agency and empowerment of populations seeking and accessing health and healthcare. Includes different levels of public health interventions that can improve health outcomes, better calibrate access to healthcare, and improve health equity within populations. (Also offered as ANTH 450; may not be taken for duplicate credit.)

SOC 452 - Disability and Society

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: SOC 151 or SOC 161

Analyzes disability from a sociological perspective. Includes consideration of historical and current views of disability and a review of related concepts from the fields of medical sociology and the sociology of deviance. Also includes an analysis of the effects of disabilities on individuals and families through the life course and a consideration of related ethical, economic, political, and social policy issues. Emphasizes disability as a social construction.

SOC 454 - Dimensions of Rural Public Health

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: SOC 151 or SOC 161

Studies health disparities in rural areas and public health interventions to address those disparities. Includes social, economic, political, and cultural influences that impact the health of individuals and families in rural settings, as well as the strategies for improving health status through culturally appropriate and effective interventions and services. Considers the impact of race, gender, and sexual orientation on health status and access to services in rural regions.

SOC 458 - Political Sociology

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: SOC 151 or SOC 161

An examination of the social context of power and politics, with special reference to such topics as who controls the state and state policy; the role of

the state in stabilizing capitalism and protecting the power of the upper class; political activities of the middle and upper classes; and labor, civil rights, and welfare rights social movements in America. Especially considers the problems of conducting and implementing social policy research for social change. Cross-listed as PLSC 346.

SOC 460 - Social Research Methods I

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SOC 320, junior standing

First in a two-course methods sequence. Examines diverse research designs used in the social sciences, i.e., survey, field study, experiment, documentary, and existing statistical data. Focuses both on logic and practice of social research. Student develops a research design to be implemented in the second course in the research sequence.

SOC 461 - Social Research Methods II

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SOC 460, junior standing

Second in a two-course methods sequence. Student implements the research project developed during the first course in this sequence. Primarily applied research, and students use the semester to collect and analyze their data and to prepare a final research report on their findings.

SOC 481 - Special Topics

Class Hours: var

Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 481 are offered primarily for upper-level undergraduate students.

SOC 482 - Independent Study

Class Hours: var

Credits: 1-3

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

An opportunity to engage in an in-depth analysis of some topic through consultation with a faculty member. A semester project ordinarily expected. Approval is based on academic appropriateness and availability of resources.

SOC 483 - Honors Thesis

Class Hours: var

Credits: 1-6

Prerequisite: Admission to departmental honors program; prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

An intensive, focused study involving independent research culminating in a written thesis approved by a thesis director and two faculty readers/committee members. May be taken more than once to a maximum of 6cr.

SOC 493 - Internship in Sociology

Class Hours: var

Credits: 3-12

Prerequisite: Prerequisites vary by track. Permission of internship coordinator required. GPA within SOC of 2.5 or better. Human Services Track Grade of "C" or better in SOC 151 or SOC 161, SOC 320, SOC 391, SOC 392, and 6cr within substantive area General Sociology Track Grade of "C" or better in SOC 151 or SOC 161, SOC 320, SOC 361 or SOC 362 or SOC 363, and 9cr (6cr within substantive area). Students who wish to intern in a human services agency must take SOC 391 and SOC 392. Applied Social Research Track Grade of "C" or better in SOC 151 or SOC 161, SOC 320, SOC 460, SOC 461, and 6cr within substantive area Sociology of Disability Services Track Grade of "C" or better in SOC 151 or SOC 161, SOC 320, SOC 391, SOC 392, SOC 452, EDEX 111

A supervised experience in a public or private organization that extends and complements course work at the university.

Spanish

SPAN 101 - Elementary Spanish I

Class Hours: 4

Lab/Discussion: 0

Credits: 4

For beginning students. The primary emphasis is on aural/oral skills. Students learn to converse and ask questions in simple present time and become acquainted with location of Hispanic populations and elements of their daily lives. Attendance is required. May not register for or take a D/F repeat in SPAN 101 when credit has already been received for a higher-numbered Spanish course.

SPAN 102 - Elementary Spanish II

Class Hours: 4

Lab/Discussion: 0

Credits: 4

Prerequisite: SPAN 101, or the equivalent as established by departmental placement examination

A continuation of SPAN 101. Students learn to express past and future time and continue to learn about Hispanic countries and their cultures. Liberal Studies credit is given. Attendance is required. May not register for or take a D/F repeat in SPAN 102 when credit has already been received for a higher-numbered course.

SPAN 201 - Intermediate Spanish

Class Hours: 4

Lab/Discussion: 0

Credits: 4

Prerequisite: SPAN 102, or the equivalent as established by departmental placement examination

A continuation of previous work on listening, speaking, reading, and writing skills. Students learn to function in everyday situations, expressing opinions and doubts, and narrating and describing in present, past, and future time. Exposure to cultural concepts through literary readings. Liberal Studies credit is given. Attendance is required. No student is allowed to register for or take a D/F repeat in SPAN 201 when credit has already been received for a higher numbered Spanish course.

SPAN 220 - Intermediate Spanish Conversation

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SPAN 201 or equivalent

Intensive work on oral communication skills with emphasis on spontaneous interpersonal speaking, discourse strategies, vocabulary building, and

pronunciation. Liberal Studies credit is given. Required for all majors and minors. No student is allowed to register for or take a D/F repeat in SPAN 220 when credit has already been received for a higher number Spanish course.

SPAN 230 - Intermediate Spanish Composition and Grammar

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SPAN 220 or equivalent;

Intensive practice in written expression and communication in Spanish together with a grammar review. Taught in Spanish. Required for all majors and minors. Meets Liberal Studies requirement for a writing-intensive course for majors. may be taken concurrently

SPAN 244 - Modern Mexico

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SPAN 201 or equivalent and participation in the Mexico Summer Study Abroad Program

Taught in Mexico as part of the IUP Mexico study abroad program; introduces the contemporary culture of Mexico. Provides a cultural perspective within which to understand current phenomena. Exposes students to readings on cultural and historical topics, current events, and folkloric narratives. Complements firsthand experience gained through field trips and through living with a Mexican family. Course is taught in Spanish on-site in Mexico and online.

SPAN 260 - Introduction to Hispanic Literature

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SPAN 230 or equivalent

A Prerequisite for any 300- or 400-level course in Hispanic literatures. Provides the tools necessary for developing literary competence and combines a study of literary genres and analysis with an introduction to the literatures of Spain and Spanish America. Taught in Spanish.

SPAN 281 - Special Topics

Class Hours: var

Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 281 are offered primarily for lower-level undergraduate students.

SPAN 330 - Advanced Spanish Composition and Grammar

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SPAN 230 or equivalent

Extensive work on the development of written expression and communication at the "advanced level" of proficiency in Spanish, as defined by the American Council on the Teaching of Foreign Languages, together with the study of advanced-level structures. Taught in Spanish.

SPAN 340 - Hispanic Cultures into the 19th Century

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: SPAN 230 or equivalent

An introduction to the significant aspects of the cultures of both Spain and Spanish America. Elements for explanation and discussion are drawn from artistic, literary, religious, geographic, social, and political manifestations of Hispanic cultures as they have revealed themselves through the early 19th century. Taught in Spanish. (Titled Hispanic Civilization through the 19th Century before 2016-17.)

SPAN 342 - Spanish Cultures from the 19th Century to the Present

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: SPAN 230 or equivalent

Analyzes the major cultural trends in 19th-, 20th-, and 21st-century Spain as they relate to its current problems, aspirations, and values. Draws elements for explanation and discussion from artistic, literary, religious, geographic, social, and political manifestations. Taught in Spanish; (May not duplicate credit for SPAN 382 taken in Valladolid.) (Titled 20th-Century Spanish Civilization and Culture before 2016-17.) offered alternate years.

SPAN 344 - Spanish-American Cultures from the 19th Century to the Present

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: SPAN 230 or equivalent

Analyzes the major cultural trends in Spanish America as they relate to its position in the world, starting with the independence movements of the early nineteenth century, through the 20th century to the present. Draws elements for explanation and discussion from social, political, artistic, literary, religious, and geographic manifestations, including indigenous and African cultural influences. Taught in Spanish; (Titled 20th-Century Spanish-American Civilization and Culture before 2016-17.) offered alternate years.

SPAN 350 - Advanced Spanish Conversation

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: SPAN 230 or equivalent. May earn credit for SPAN 350 before taking SPAN 230 only by completion of a minimum six-week study abroad program and successful prior completion of SPAN 220 (or the equivalent).

Extensive practice in oral communication skills. Emphasizes development of fluency in speaking over a wide range of topic areas. Required for all majors and minors.

SPAN 362 - Survey of Peninsular Literature

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: SPAN 260 or permission

Introduces a careful and critical reading of literary texts from Spain, read either in their entirety or in select passages. Taught in Spanish; offered alternate years.

SPAN 364 - Survey of Spanish-American Literature

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: SPAN 260 or permission

Introduces a careful and critical reading of Spanish-American literary texts, read either in their entirety or in select passages. Taught in Spanish; offered alternate years.

SPAN 382 - Contemporary Spain

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: SPAN 230 and SPAN 260 or permission

Gives a general view of Spain today in the areas of society, economy, and political institutions. (See SPAN 342)

SPAN 382-389 - Pennsylvania-Valladolid Program

Credits: 18

Prerequisite: SPAN 230 and SPAN 260 or permission

Contact chairperson, Department of Foreign Languages. Courses taken in Valladolid include SPAN 382-SPAN 389 and SPAN 482 (3cr). Descriptions follow.

SPAN 383 - Geography and History of Spain

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: SPAN 230 and SPAN 260 or permission

Introduces a panorama of Spanish physical, social, and economic geography, including the recent autonomic division of the country and the communication among the autonomies. Also reviews the history of Spain from the 15th century to the present with special emphasis on today's Spanish institutions.

SPAN 384 - History of Spanish Art

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: SPAN 230 and SPAN 260 or permission

Exposure to the richness of art in the Iberian Peninsula and in particular in the area of Madrid and Castilla-Leon. Studies the evolution of Spanish art in history, giving more emphasis to contemporary tendencies.

SPAN 385 - Survey of Spanish Literature

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: SPAN 230 and SPAN 260 or permission

Introduces a general study of Spanish literature from its origin to the present time; students learn to appreciate and analyze the different literary genres. An emphasis on 20th-century literature.

SPAN 389 - Theory and Practice of Spanish Language

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SPAN 230 and SPAN 260 or permission

Introduces Spanish syntax, morphology, and the Spanish language lexicon, as well as familiar and formal conversation and idiomatic expressions used in everyday situations.

SPAN 390 - Teaching of Elementary Content through the Spanish Language

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Passage of a language proficiency examination and instructor permission

Studies current theories of language acquisition processes in children and develops foreign language instructional objectives and activities that integrate language and cultural learning with the content areas of the elementary school curriculum. Through hands-on practice, students develop techniques for teaching functional language, planning lessons, testing language skills, setting curricular objectives, and selecting/designing materials appropriate to the needs and interests of elementary school foreign language learners.

SPAN 402 - Translation and Interpretation

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SPAN 230, SPAN 350

Fundamental translation skills for use in business and industry as well as in academic and popular fields.

SPAN 410 - Medieval Literature

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SPAN 260 or permission

Reading and discussion of various medieval genres: brief prose narrative, epic, lyric, and didactic poetry, prose, and medieval drama. Taught in Spanish.

SPAN 411 - Golden Age Spanish

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SPAN 260 or permission

An analysis of themes, motifs, and stylistic devices of Spanish poetry, novel, and theater of the Renaissance and Baroque. Taught in Spanish.

SPAN 412 - The Spanish Novel of the 19th and 20th Centuries

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SPAN 260 or permission

An analysis of selected novels from three major periods: the 19th century, the Generation of 1898, and the post-Civil War. Taught in Spanish.

SPAN 413 - Spanish Poetry of the 19th and 20th Centuries

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SPAN 260 or permission

The study and analysis of lyric poetry in Spain from 19th-century poetry through modernism and its evolution to the present. Taught in Spanish.

SPAN 421 - Modern Hispanic Short Story

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SPAN 260 or permission

The critical analysis of short stories by Spanish and Spanish-American authors. Taught in Spanish; offered in four-year rotation.

SPAN 430 - 20th-Century Spanish-American Prose

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SPAN 260 or permission

Traces literary expressions from the turn of the century to the present in the major prose expressions of the essay, the short story, and the novel. Taught in Spanish; offered in four-year rotation.

SPAN 450 - Conversation Forum

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SPAN 350 or equivalent

Extensive work on the development of speaking skills at the "Advanced" level of oral proficiency, as defined in the Speaking Guidelines developed by the American Council on the Teaching of Foreign Languages. Focuses on paragraph-length discourse and narration and description in present, past, and future time frames within a variety of topics and contexts.

SPAN 453 - Spanish Phonetics and Phonemics

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SPAN 230

An introduction to the study of the phonological system of Spanish and emphasis on improving pronunciation. Includes a theoretical basis for understanding the Spanish sound system, pronunciation practice and recordings, study of Spanish dialects, and linguistic analyses. Taught in Spanish. Required for Spanish education K-12 majors; highly suggested for Spanish majors.

SPAN 481 - Special Topics

Class Hours: var
Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 481 are primarily for upper-level undergraduate students.

SPAN 482 - Independent Study

Class Hours: var
Credits: 1-6

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost

An opportunity to engage in an in-depth analysis of some topic dealing with the Spanish language and culture through consultation with a faculty member. Approval is based on academic appropriateness and availability of resources.

Speech Pathology and Audiology

SPLP 111 - Introduction to Communication Disorders

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Major in speech-language pathology and audiology or minor in audiology

An introduction to study of physiological, acoustical, and scientific processes involved in production and reception of speech. The genetic development of speech sounds and factors that hinder or facilitate speech and language acquisition.

SPLP 122 - Clinical Phonology

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Speech-language pathology and audiology major

Detailed study of the classification of American-English phonemes using the physical and acoustical perspectives. Development of proficiency in use of International Phonetic Alphabet for allophonic transcriptions of normal and disordered speech.

SPLP 222 - Introduction to Audiology

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Speech-language pathology and audiology major or audiology minor

The study of auditory function, anatomy, and physiology of the auditory mechanism, psychophysics of sound, types and causes of hearing loss, measurement of hearing, and educational considerations for children with hearing loss.

SPLP 242 - Speech Science

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Speech-language pathology and audiology major

Corequisite: SPLP 251

An introduction to the theoretic properties, biological characteristics, and physical analysis of human speech production, speech perception, and swallowing. Content is integrated into applications of clinical instrumentation and measurement.

SPLP 251 - Anatomy and Physiology of Speech and Swallowing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Speech-language pathology and audiology major

Corequisite: SPLP 242

Examines the structure and function of the body systems involved in speech production (i.e., respiration, phonation, articulation) and swallowing and an introduction to the nervous system. Normal variances based on age, gender, and race are included. Comparisons between normal and disordered clinical presentations are introduced.

SPLP 275 - Language Science

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Speech-language pathology and audiology major, SPLP 111

Addresses the structure of language and the cognitive processes underlying normal language behavior. Applications to various clinical populations are also addressed. Prerequisites include an introductory course in communication disorders.

SPLP 310 - Observation in Communication Disorders I

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Prerequisite: Speech-language pathology and audiology majors with junior standing

Provides a context for observation of individuals of all ages receiving speech-language pathology or audiology services. Principles of observation, as well as assessment, prevention, and intervention are discussed.

SPLP 311 - Aural Rehabilitation

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Speech-language pathology and audiology major with junior standing, or audiology minor

An examination of the effects of hearing loss at different stages of development and the technology and rehabilitative procedures used with hard-of-hearing and deaf children and adults.

SPLP 312 - Advanced Audiology and Hearing Disorders

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: SPLP 222

Contains advanced audiological topics concerning auditory function; types and causes of hearing disorders; advanced evaluation procedures and techniques for hearing; and social, emotional, and educational impacts of various auditory disorders on adults and children.

SPLP 334 - Language Development

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Speech-language pathology and audiology major

The study of development of an interpersonal communication system; language as a system of symbols for communication; the structure of the English language, including phonology, syntax, semantics. Highlighting of neurological, social, and psychological bases of language development.

SPLP 342 - Neuroscience for Communication Disorders

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Speech-language pathology and audiology major, junior standing

An overview of the basic anatomy of the central nervous system and its control of human swallowing and communication. Includes the biological science principles of speech and language processing and neurogenic communication and swallowing disorders in children and adults. (Titled Speech Science II Neuroscience before 2016-17.)

SPLP 401 - Communication and Social Competence for Children with Autism

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Speech-language pathology and audiology major with junior standing, or instructor permission

Examines the interplay among cognition, language, and communication in children and adolescents with autism spectrum disorders (ASD). A team approach is emphasized outlining the roles of parents, speech-language pathologists, special education teachers, classroom teachers, school psychologists, and school administration. Methods for assessment of and intervention for language and social communication skills are introduced. Clinical methods that can facilitate social skills, play, and friendships with peers are emphasized.

SPLP 406 - Clinical Management of Articulation and Language

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Speech-language pathology and audiology major, junior standing, SPLP 334

An introduction to the principles and practices for assessment and intervention of articulation/phonology and language disorders using a variety of experiences that allow students to practice applying their clinical skills to practical situations. An overview of diagnostic tools, assessment principles and techniques, and intervention principles and techniques as related to a variety of articulation/phonology and language disorders.

SPLP 408 - Organic Disorders

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Speech-language pathology and audiology major, junior standing

Introduces the theoretic foundations, clinical characteristics, diagnostic procedures, and treatment options for three subspecialties in speech-language pathology: stuttering, voice disorders, and dysphagia.

SPLP 410 - Observation in Communication Disorders II

Class Hours: 1
Lab/Discussion: 0
Credits: 1

Prerequisite: SPLP 310

A focused observation of patients receiving speech-language pathology or audiology services. Discusses professional codes of ethics, principles of observation, assessment, prevention, and intervention. Provides supervised services to one patient in the IUP Speech, Language, and Hearing Clinic.

SPLP 412 - Organization and Administration of Speech, Language, and Hearing Programs

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Junior status (60 or more credits), 3.25 GPA

Establishment and maintenance of speech and hearing programs within various administrative organizations, particularly in the public schools and health care settings. Techniques of client identification, scheduling, recordkeeping, appropriate referral, material and equipment selection, counseling, and the development of coordinated professional and interdisciplinary procedures are covered. Emphasis is given to issues of ethical practice and cultural diversity.

SPLP 420 - Undergraduate Clinic

Class Hours: var
Credits: 1-3

Prerequisite: SPLP 310, SPLP 410, GPA of 3.0 or better, all major courses, program director's permission

An experience in working with individuals or groups of persons who exhibit speech, language, or hearing problems. Treatment planning, documentation, and service delivery.

SPLP 422 - Central Auditory Processing Disorders in the Educational Setting

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: SPLP 222

Includes three sections: (1) introductory information about central auditory processing disorders (CAPD), (2) screening instruments and test batteries used by audiologists and speech-language pathologists, and (3) management and remediation options used by professionals, parents, and children with the diagnosis. The introductory information covers the characteristics, causes, comorbid conditions, influences on, and prevalence of CAPD. The various models and profiles of auditory processing disorders are presented. The personnel responsible for a multidisciplinary approach to assessing and treating CAPD are discussed. Terminology used by audiologists and SLPs is presented, as well as anatomical and physiological aspects of central auditory processing. Covers samplings of test materials commonly used in clinics, and (if time allows) students get hands-on practice administering screenings and diagnostic tests. The final third of the class focuses on environmental modifications, remediation activities, and compensatory strategies used by therapists for CAPD diagnoses.

SPLP 481 - Special Topics

Class Hours: var
Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 481 are primarily for upper-level undergraduate students.

Sustainability Studies

SUST 201 - Introduction to Sustainability Studies

Class Hours: 3

Lab/Discussion: 01

Credits: 3

Keystone course for students pursuing a minor in Sustainability Studies. To live sustainably is to aspire for balance with the environment in a society that seeks equality, justice, and the well-being of all species. Considers definitions of sustainability and introduces the principles, histories and practices of sustainability through a critical combination of interdisciplinary, global, and multicultural perspectives. Enables grappling with major, interdependent social, economic, cultural, and environmental contexts and issues related to sustainability. Engages in a praxis-based problem-solving research project, which addresses a core set of current sustainability issues emerging in local, regional, national, and global contexts.

SUST 281 - Special Topics

Class Hours: var

Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 281 are offered primarily for lower-level undergraduate students.

SUST 481 - Special Topics

Class Hours: var

Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 481 are primarily for upper-level undergraduate students.

Theater

THTR 101 - Introduction to Theatre

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Explores major conceptual, philosophical, and aesthetic underpinnings of theatre arts. Includes the analysis of major historical and contemporary works of drama through dramatic literature and live and mediated performance. Introduces key elements of theatre through examining the roles and functions of acting, playwriting, directing, and design. Meets Fine Arts requirement for Liberal Studies. THTR 101 and THTR 161 may be substituted interchangeably for D/F repeats. THTR 101 and THTR 161 may not be used for duplicate credit. THTR 161 is required for the Effective Teamwork and Communication minor.

An exploration of the theatre arts, examining its major conceptual and aesthetic underpinnings, major periods of theatre history, selected works of dramatic literature, and the primary theater arts of acting, directing, design, and technical theatre. Class experience includes the analysis of at least two major works of drama, attending two live productions, and viewing of selected televised plays and musicals. Meets Fine Arts requirement for Liberal Studies. THTR 101 and THTR 161 may be substituted interchangeably for D/F repeats. THTR 101 and THTR 161 may not be used for duplicate credit. THTR 161 is required for the Effective Teamwork and Leadership minor.

THTR 111 - Foundations of Theater

Class Hours: 3

Lab/Discussion: 0

Credits: 3

A primary course for those engaged in theater and any other performance-related area so as to define the nature of theater art, develop one's own individual system of analysis, and finally acquire an understanding of process, dramatic structure, composition, genre, theatrical styles, and a theory of performance.

THTR 116 - Fundamentals of Theatrical Design

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Introduces the fundamentals of scene, costume, lighting, and sound design for theater and dance. Focuses on creative processes used by designers to make choices. Topics include script analysis, director and designer communication, and the integration of the design elements into a unified production.

THTR 120 - Stagecraft

Class Hours: 3
Lab/Discussion: 0
Credits: 3

An exploration of the material, methods, and procedures utilized in creating a scenic environment. Through instruction and practical applications, students learn the basis of scenic construction and develop competency with the basic materials and equipment used in a theatrical scenery shop.

THTR 122 - Costume Workshop

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Instruction and practical experience in the process of building costumes for the stage. Activities include fitting, cutting, sewing, dyeing, and painting. Also gives instruction in the maintenance of wardrobe, costume stock, materials, and properties.

THTR 130 - Stage Voice

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Theater majors only or instructor permission

Instruction in basic development of the vocal instrument of the actor in stage performance. Emphasizes resonance, quality, pitch, and projection of the voice while improving the student's ability to articulate.

THTR 131 - Stage Movement

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Instruction in basic stage movement and the physicalization of character. Includes work in character development through variety in movement, introductory work in juggling, stage combat, and mime, and the assessment, awareness, and correction of individual movement problems.

THTR 132 - Introduction to Acting

Class Hours: 3
Lab/Discussion: 0

Credits: 3

Introduces the art and craft of the theater from the actor's point of view. Through practical application, students develop personal and professional skills that enhance oral communication, self-presentation, and self-confidence. Students also develop the ability to respond knowledgeably to theatrical productions as an audience member.

THTR 140 - Foundations of Performance

Class Hours: 3

Lab/Discussion: 0

Credits: 3

An intensive, experiential workshop that introduces and explores fundamental components of theatrical performance (vocal, physical, ensemble, imaginative, analytic) in a holistic sequence of exercises and projects. Provides incoming theater majors with a common set of foundational theater skills and knowledge, a theatrical vocabulary, and collaborative ensemble interaction that enriches the freshman experience. As students progress, whether on a performance track or in other areas, this course gives them a shared context from which to grow as theater artists.

THTR 161 - Introduction to Theatre: Interpersonal Practices

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Explores the theater arts, examines its major conceptual and aesthetic underpinnings, major periods of theater history, selected works of dramatic literature, and the primary theater arts of acting, directing, design, and technical theater. Class experience includes the analysis of at least two major works of drama, attending two live productions, and viewing of selected televised plays and musicals. Analyzes examples of interpersonal relations of teams using dramatic literature, and implement primary acting and directing tools in discovering solutions to challenges in interpersonal relations. Designed for those seeking a minor in Effective Teamwork and Communication. Meets Fine Arts for Liberal Studies. THTR 101 and 161 may be substituted interchangeably for D/F repeats, but THTR 161 is required for the Effective Teamwork and Communication minor. THTR 101 and THTR 161 may not be used for duplicate credit.

THTR 211 - History and Literature: Classical

Class Hours: 3

Lab/Discussion: 0

Credits: 3

A lecture course that surveys Western theater from its origins through the ancient Greeks to medieval times. Students examine styles and genres of the period through the work of playwrights, actors, and theorists. Includes the study of cultural, social, political, and economic contexts of Western theater in this period; contextual comparisons to Eastern theater of the same era; as well as the changes in performance practice, the architecture of performance space, theater technology, and audience composition.

THTR 212 - History and Literature: Renaissance

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Surveys Western theater from the Renaissance to the Industrial Revolution. Examines styles and genres of the period through the work of playwrights, directors, actors, designers, and theorists. Includes the study of cultural, social, political, and economic contexts of Western theater in this period, as well as the changes in performance practice, the architecture of performance space, theater technology, and audience composition.

THTR 213 - History and Literature: Modern and Contemporary

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Surveys Western theater from the late 19th century to the present. Examines styles and genres of the period through the work of playwrights, directors, actors, designers, and theorists. Includes the study of cultural, social, political, and economic contexts of Western theater in this period, as well as the changes in performance practice, the architecture of performance space, theater technology, and audience composition.

THTR 221 - Basic Stage Lighting

Class Hours: 3
Lab/Discussion: 0
Credits: 3

An introduction to lighting instruments, color media, control boards, physical laws of electricity and optics, graphics, and conventional techniques used in lighting theatrical productions.

THTR 223 - Makeup for the Stage

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Deals with practical application of straight and character makeup and may include instruction in creating beards, wigs, prosthetics, and masks.

THTR 225 - Theater Graphics

Class Hours: 1
Lab/Discussion: 3
Credits: 3

A practical introduction to hand drawing, drafting, and graphic technology applied to theater design, technology, and stage management.

THTR 226 - Stage Management

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: THTR 111 or instructor permission

A practical survey of stage management as it pertains to theater, dance, and opera productions. Covers the role of the stage manager from pre-production to post-production as well as the techniques, communication methodology, practices, and standard theater terminology.

THTR 231 - Improvisation and Creativity

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: THTR 140 or instructor permission

Introduces short- and long-form improvisation techniques and scene practice. Explores an overview of improvisatory styles and practitioners. Analyzes how social mores, world events, and prevailing attitudes shaped and continue to shape the world of improvisational theater throughout theater history. Studies and practice culminate in final improvisation performance project.

THTR 240 - Acting I

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: THTR 140

The study of the primary elements of the Stanislavski system of character development. Includes text analysis and the development of physical action through a character's subtext, as well as motivational and improvisational techniques.

THTR 281 - Special Topics

Class Hours: var
Credits: 1-3

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 281 are offered primarily for lower-level undergraduate students.

THTR 310 - Theater Criticism

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Junior or senior theater major status or permission

Gives students of theater an opportunity to use what they have learned in the areas of theater (acting, directing, design, and playwriting) toward the critical process of responding to theater productions. Examines differences between theater criticism and theater reviews while learning to write critical responses to live performances both on and off campus.

THTR 311 - Dramaturgy

Class Hours: 3
Lab/Discussion: 0
Credits: 3

An introduction to the study and profession of dramaturgy. A study of the historical significance of the dramaturg through the reading of early and modern practitioners. An examination of a number of critical theories that students will use to contextualize play scripts under study. Performance of such dramaturgical tasks as identifying script references, historicizing social conventions and customs, comparing translations of notable foreign plays, preparing information packets for actors, directors, and design teams, drafting program notes, and organizing talkbacks. An opportunity to provide services for a department production. (Cross-listed as ENGL 309.)

THTR 313 - American Theater Between the Wars

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Surveys popular and significant American plays written and produced in the 1920s and 1930s. Examines theatrical styles, trends, and themes that reflect the era's values and the challenges and threats to those values. Analyzes and compares the work of playwrights, directors, performers, and designers within the historical and social contexts of the past Great War and the impending Second World War, as well as formulates comparisons to the world of the 21st century.

THTR 320 - Scene Design

Class Hours: 3
Lab/Discussion: 0

Credits: 3

Prerequisite: THTR 116 or permission

An introduction to scenic design that applies the fundamental principles of theatrical design. Topics include an overview of current scene design practice, design conceptualization, graphic communication methods, and a method of designing theatrical scenery. Practical applications are emphasized through a series of class exercises.

THTR 321 - Stage Lighting Design

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: THTR 116 or permission

An introduction to stage lighting that applies the fundamental principles of theatrical design. Stage lighting topics include an overview of current lighting methods and equipment, the controllable properties and functions of stage lighting, learning to see light, a creative approach to stage lighting, and design graphics. Practical applications are emphasized through a series of class exercises.

THTR 322 - Costume Design

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: THTR 116 or permission

An introduction to the discipline of costume design for the theater with an emphasis on script analysis, figure drawing, character definition, and control of the design elements, supplemented by an overview of costume history.

THTR 323 - Sound Design

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Covers the basic principles and theories of designing sound for the theater. Through demonstration and practical application, covers the following principal areas: basic electronics, recording techniques and equipment, musical and effects integration, theater acoustics, designing sound, and sound reinforcement.

THTR 340 - Acting II

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: THTR 240

A continuation of the study of Stanislavski system, focusing on his primary texts, toward a development of individual student techniques. Emphasizes scene study through applying techniques to scene rehearsal and role problems and exploring the relationships between psychological states, physical action, and truth in acting.

THTR 341 - Acting Styles

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: THTR 130/THTR 131, THTR 240 or instructor permission

A study and practice of advanced acting skills, with special emphasis on style and period. Possible areas of focus: Greek Classical, Commedia Dell'Arte (farce), French Neoclassical, Restoration Comedy, Melodrama, High Comedy (Wilde/Coward), or Theater of the Absurd.

THTR 342 - Acting Shakespeare

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: THTR 240, THTR 340 or instructor permission

An advanced acting studio that prepares students to perform in Shakespeare's plays. A background overview of the Elizabethan period in addition to various methods toward approaching the movement, language, and verse forms from an actor's point of view.

THTR 347 - Playwriting

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: THTR 111 or instructor permission

A practical exploration of the craft and process of playwriting. Focuses primarily on the practical, "hands-on" experiences approximating the "developmental process" currently in use in the American theater. The student is guided from the initial concept through synopsis, outlines, working drafts, and completion of an original one-act play and a "staged reading" of this project. Either of these courses may be substituted for each other and may be used interchangeably for D/F repeats but may not be counted for duplicate credit. Cross-listed as ENGL 347.

THTR 350 - Directing

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Minimum of THTR 240 and instructor permission. Written application to the instructor is required.

An introduction to basic directing skills: casting, floor plans, blocking, rehearsal procedures, and the applications of scene and character analysis. Prepare short scenes for class presentation.

THTR 361 - The Performance of Caring

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Priority enrollment for Nursing and Allied Health majors, or by instructor permission

Using acting skills to engender healing relationships. A creative, empathetic, and practical approach to preparing future healthcare professionals with enhanced skills in the art of establishing and building patient and colleague relationships. Content is delivered, and student learning is facilitated, through the use of approaches common to the training of performing artists.

THTR 371 - Musical Theater History

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Surveys the development of musical theater as a performing art form in America. Examines the ways musicals both reflect and embody values,

tastes, and trends from their respective historical eras. Explores musical theater from historical, political, social, and aesthetic perspectives. Focuses on the beginnings of musical theater to the present with emphasis on the cultural development and impact of the art form.

THTR 372 - Musical Theater Auditioning

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: THTR 240 or instructor permission

Introduces the study of audition techniques for musical theater, music, scene, and lyric analysis, and characterizations addressed. Enhances and improves audition and performance skills as well as the ability to find and choose appropriate audition material.

THTR 373 - Musical Theater Scene Study

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: THTR 240 or instructor permission

An intensive text and score analysis in relation to the process of characterization for the actor, singer, dancer in musical theater focused through musical scene work into song performance. In addition, basic insights and strategies for a professional career in theater are presented.

THTR 471 - Musical Theater Performance

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Develops musical theatre skills at a more advanced level in a rehearsal and production format. Applies advanced performance techniques to bring characters to life on stage, while using a contemporary American musical. Culminates in a final performance focusing on ensemble building and the creation of fully developed characterizations. This is a repeatable course that meets the Theatre, Dance, and Performance degree requirements.

THTR 480 - Theater Seminar

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Prerequisite: THTR 111, THTR 486, senior standing

Capstone course for majors. Students complete work on their senior thesis project and examine career options. Students develop résumés, portfolios, and other materials particular to their education as a theater or dance artist and their aspirations for a career or postgraduate studies in a creative field. Offered fall semester only.

THTR 481 - Special Topics

Class Hours: var

Credits: 1-6

Prerequisite: As appropriate to course content

Offered on an experimental or temporary basis to explore topics not included in the established curriculum. A given topic may be offered under any special topic identity no more than three times. Special topics numbered 481 are primarily for upper-level undergraduate students.

THTR 482 - Independent Study

Class Hours: var
Credits: 1-6

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost
Independent study in theater may be either purely academic or may be a practical production project, supported by a written document giving evidence of significant scholarly investigation or original, creative effort. May be repeated to a maximum of 6cr. Approval is based on academic appropriateness and availability of resources.

THTR 484 - Directing Studio

Class Hours: 3
Lab/Discussion: 2
Credits: 3

Prerequisite: THTR 350 or instructor permission. Written application to the instructor is required.
An opportunity for students to direct scene work, one-act plays, or larger projects, according to individual levels of experience, preparation, and readiness, as well as program resources. The focus is on practical application of directing principles to specific issues. Student projects are performed in public, open-class recitals. May be repeated.

THTR 486 - Practicum in Production

Class Hours: var
Credits: 0-3

Prerequisite: Theater major standing or instructor permission
An opportunity with academic credit to make significant contributions to campus productions augmenting theater course work in the areas of directing, acting, stage management, technical direction, design (sound, set, lights, costumes, makeup), properties, scenic construction and scenic art painting, costume technology, dance, and running crews. Repeatable course required of all theater majors for a minimum of six semesters, one of which must be a final project for senior majors.

THTR 487 - Acting Studio

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Prerequisite: Minimum of THTR 240 or instructor permission. Written application to the instructor may be required when necessary.
An advanced studio course offering scene practice with faculty direction, coaching, and criticism. Specific focus of scene work varies from semester to semester, including improvisation techniques, stage dialects, audition techniques, stage combat, physical theater, and acting for the camera as alternating semester options. May be repeated with a different focus each time.

THTR 489 - Design/Technology/Management Studio

Class Hours: 3
Lab/Discussion: 0
Credits: 3

Open to all students desiring instruction in a variety of technical theater areas not presently covered in other courses. Topics to include stage management, set props, media makeup, technical drawing/mixed media, costume technology, and scene painting. May be repeated with each different topic area.

THTR 493 - Internship

Class Hours: var
Credits: 3-12

Prerequisite: Instructor permission

Opportunities for students to gain experience with professional performance organizations in areas related to theater and dance.

University-wide Courses

UVWD 480 - T.H.I.S. Seminar

Class Hours: 3

Lab/Discussion: 0

Credits: 3

An academic seminar taken at the Pennsylvania State System of Higher Education University Center in Harrisburg in conjunction with the T.H.I.S. internship. Consists of public policy information, decision making, and budgeting and addresses question-and-answer sessions with leading state government policymakers. See description under Academic Affairs area. Restricted to the T.H.I.S. internship participant. See UVWD 493.

UVWD 493 - T.H.I.S. Internship

Class Hours: var

Credits: 12

A practical experience at the policymaking level of the state government that also requires a research project. Must have a 3.0 GPA and submit a sample of writing skills with the application to the Academic Affairs office. Open to any IUP major. See description under Academic Affairs area. Concurrent seminar course required. See UVWD 480.

Vocational Education

VOED 100 - Preparation of the Vocational Professional I

Class Hours: var

Credits: 1-15

Personalized, self-paced vocational teacher preparation. Develops, demonstrates, and documents competence in selected pedagogical competencies. Individualized instruction is supplemented with monthly seminars. Self-evaluation is encouraged in the program, utilizing videotaping and the feedback from a team of professional teacher educators.

VOED 101 - Introduction to Career and Technical Education

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Prerequisite: Recommendation by Western Region Career and Technical School director

Emphasizes basic elements of teaching in the diverse secondary career and technical classroom. A field-based course focusing on skill areas defined by the Pennsylvania Department of Education—Bureau of Career and Technical Education, such as classroom safety, accommodations for students with special needs, and classroom management.

VOED 102 - Instructional Planning in the Career and Technical Classroom

Class Hours: 2

Lab/Discussion: 0

Credits: 2

Prerequisite: VOED 101

Instructional planning for the CTE classroom and laboratory delivered through field-based instruction. Major emphasis is on planning for instruction, safety procedures, and CTE performance objectives. Instructional plans will include consideration of individual learning styles and accommodations for students with special needs.

VOED 103 - Strategies for Teaching Career and Technical Education

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: VOED 101, VOED 102

Introduces instructional strategies and evaluation methods appropriate in career and technical education. Emphasis is on the planning and delivery of lessons that apply these strategies in the secondary career and technical classroom. Special attention is given to adapting and individualizing instruction for the diverse student population enrolled in the career and technical class. A field-based course with classroom visitations by a university faculty member.

VOED 201 - Making Accommodations for Students with Special Needs in the Career and Technical Classroom

Class Hours: 1

Lab/Discussion: 0

Credits: 1

Prerequisite: VOED 101, VOED 102, VOED 103

A companion course to EDEX 301. Students apply instructional methods effective for educating students with disabilities and learning style differences in their career and technical classroom. A field-based course with classroom visitations by a university faculty member.

VOED 202 - Industry Linkages for Career and Technical Programs

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: VOED 201

Addresses the requirements for industry input and validation for all secondary career and technical programs and focuses on developing and maintaining an effective occupational advisory committee. Emphasis is on the teacher's responsibility for providing appropriate information to the committee and taking action to follow up on the committee's recommendations.

VOED 203 - Incorporating Reading and Communications Strategies in the Career and Technical Classroom

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: VOED 102, VOED 103

Addresses methods and materials for assisting students as they read, study, and learn in the career and technical classroom. Emphasis is on approaches that facilitate learning of both content and process. Current research is explored, and classroom applications are emphasized for integrating academic standards. A field-based course with classroom visitations by a university faculty member.

VOED 301 - Integrating Math and Science in Career and Technical Education

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Completion of course work for Vocational I certificate

Focuses on the integration of math- and science-related content in the career and technical classroom. Current Pennsylvania Department of Education mandates and strategies for meaningful integration and assessment are addressed. Facilitating the academic skill development of secondary career and technical students is emphasized. A field-based course with classroom visitations by a university faculty member.

VOED 302 - Career Education in the Career and Technical Classroom

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Completion of course work for Vocational I certificate

Emphasizes current labor market statistics and resources for identifying labor market trends. The influence of interests, aptitudes, and work style preferences in making informed career decisions are explored. The role of career and technical student organizations, articulation agreements, and work-based learning to enhance career education in the career and technical classroom are discussed. The emphasis is on integrating career information relevant for the career and technical program in the classroom and a review of the mandates for this integration.

VOED 395 - Vocational Education Writing Experience

Class Hours: 0

Lab/Discussion: 0

Credits: 0

Writing assignments such as abstracts, logs of activities, philosophy papers, training plans, presentation plans, lesson plans, etc., are completed in conjunction with selected instructional modules from VOED 100 and VOED 400.

VOED 400 - Preparation of the Vocational Professional II

Class Hours: var

Credits: 1-15

Prerequisite: Successful completion of VOED 100

Personalized, self-paced vocational teacher preparation. Develops, demonstrates, and documents competence in selected teaching skills in the areas of program planning, program development, program evaluation, and managing and evaluating instruction in a vocational school setting. Self-evaluation is encouraged in the program, utilizing videotaping and the feedback from a team of professional teacher educators.

VOED 402 - Special Topics in Vocational Pedagogical Preparation

Class Hours: var

Credits: 1-15

Prerequisite: Center permission

Opportunities to develop additional teaching skills under professional supervision. Topics are determined through identification of priority areas in vocational education using national and state surveys and students' individual needs.

VOED 404 - Research in Career and Technical Education

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Completion of course work for Vocational I certificate

Introduces research in the career and technical classroom. An emphasis is placed on using a variety of research methods to solve problems in the

educational environment. Research findings are implemented into the classroom environment and results are shared with peer career and technical teachers.

VOED 405 - Professional Seminar in Career and Technical Education

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Prerequisite: Completion of course work for Vocational I certificate

A history of career and technical education; the impact of the educational reform on career and technical education and workforce development and career and technical education's importance within our society. Topics include leaders in vocational education; societal influences on vocational curriculum design; and professional responsibilities, legislative initiatives, social issues, and organizations involved in and affecting career and technical and workforce development education. A capstone course focusing on the professional growth of the career and technical teacher intern.

Women's and Gender Studies

WGS 200 - Introduction to Women's and Gender Studies

Class Hours: 3

Lab/Discussion: 0

Credits: 3

An interdisciplinary, cross-cultural survey of the ways in which gender interacts with race, age, class, ethnicity, nationality, and other dimensions of identities to shape human consciousness and determine the social, political, and cultural organizations of human institutions and societies.

WGS 301 - Asian American and Asian Diasporic Women's Literature

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces more than 100 years of the unique, diverse, and dynamic literary tradition of the 20th and 21st century Asian American and Asian diasporic women's literature in a wide range of Asian cultural, historical, national, global, and American multiethnic contexts. Intersects and is enriched by gender, race, ethnicity, class, sexuality, language, immigration, global migrant labor, citizenship, decolonization, as well as Asian indigenous and ethnic women's histories.

WGS 400 - Feminist Theories

Class Hours: 3

Lab/Discussion: 0

Credits: 3

Introduces the vigorous, interdisciplinary, complex, and diverse intellectual history of feminist theories, methodologies, and politics. Includes classical feminist advocacy from early centuries to feminist theories in early 21st century, from Euro-American feminist philosophical traditions to the more global, multicultural, intersectional, and continuously multidisciplinary feminist criticisms, with rich dialogues crossing periods and borders. Intersects and is enriched by multiple critical categories of gender, sexuality, class, race, ethnicity, nation, culture, knowledge, and power. Stimulates, engages with, and empowers students. Encourages students to actively apply feminist knowledge to their own cross-disciplinary learning, personal growth, empowerment, and activist social transformation.

WGS 482 - Independent Study

Class Hours: var

Credits: 1-3

Prerequisite: Prior approval through advisor, faculty member, department chairperson, dean, and Office of the Provost
An opportunity to engage in an in-depth analysis of some topic through consultation with a faculty member. A semester project ordinarily expected.
Approval is based on academic appropriateness and availability of resources.

Directory

Note: All IUP personnel and students can be found in the online directory at <http://search.people.iup.edu>.