Ph.D in Safety Sciences

Department of Safety Sciences

Handbook Updated July 2020

Ph.D. in Safety Sciences

Department of Safety Sciences
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Program Website: www.iup.edu/SafetyPhD

TABLE OF CONTENTS

INTRODUCTION

Welcome to the Ph.D. in Safety Sciences program at Indiana University of Pennsylvania.

Indiana University of Pennsylvania

As an institution of higher learning, Indiana University of Pennsylvania (IUP) is committed to the preservation, expansion, and transmission of knowledge in all its forms. As a university within the Pennsylvania State System of Higher Education, IUP has primary responsibilities of providing high quality education at a reasonable cost and assessing and responding to the higher educational needs of the commonwealth; as a university, IUP has the responsibility of being concerned with the needs of the nation as a whole and those of the international community at large so far as its resources allow.
At the graduate level, IUP is committed to encouraging intellectual excellence, research, and scholarship, to provide in–depth study in each student's special field; and to stimulate continued cultural and intellectual growth for faculty and students.

IUP's 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 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 others 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, the nation, and the world.

Affirmative Action
www.iup.edu/gradcatalog

Title IX Reporting Requirement
www.iup.edu/gradcatalog

Student Conduct and Student Rights
www.iup.edu/studentconduct/policies/
www.iup.edu/gradcatalog

Department of Safety Sciences

The mission of the Department of Safety Sciences at Indiana University of Pennsylvania is to prepare highly qualified individuals for careers in safety, health, and environmental applied sciences.

Mission Statement and Program Objectives

The Doctor of Philosophy in Safety Sciences prepares safety professionals with advanced skills in the anticipation, recognition, evaluation, control, and prevention of safety, health, and environmental hazards in the work environment. Another objective is to train individuals to teach safety sciences at academic institutions. Graduates of this degree program will be able to conduct independent research.

Faculty and Staff

Doctoral Program Coordinator
Dr. Jan K. Wachter

Department Chairperson
Dr. Tracey Cekada

Faculty Member	Office	Phone Number	E-mail Address
Dr. Christopher Janicak	136 Johnson Hall	724-357-3274	cjanicak@iup.edu
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Admission

It is expected that students entering the Ph.D. program in safety sciences will already have completed a master's degree in safety sciences, occupational safety, industrial hygiene or other closely related discipline. A highly qualified applicant may enter the doctoral degree program with a baccalaureate degree. Such students must meet the Master of Science in Safety Sciences degree program admission requirements and complete the Master of Science in Safety Sciences degree requirements en route to the Ph.D.

Students with a master's degree in safety or a closely related field seeking admission to the Doctor of Philosophy in Safety Sciences degree program must meet the following criteria:

1. Have earned a master's degree from a regionally accredited college or university

   A student must have a master's degree in safety sciences or a closely related field such as industrial hygiene, environmental health, or ergonomics. Students not possessing a master's

degree in safety sciences or a closely related field but having a master's degree in a technical field such as industrial engineering may be admitted to the program provided they can demonstrate they meet competency areas in math, chemistry, physics, safety management, industrial hygiene, fire safety, and ergonomics. The competency areas can be met through prior coursework, certifications, taking additional coursework, or through work experience and training.

2. Applicants will also be required to demonstrate an ability to conduct independent research through a thesis, published research article, white paper, etc.

3. Have a minimum graduate grade-point average of 3.0 (on a 4.0 scale)

4. The doctoral program coordinator will review the following to assist in making acceptance decisions:

   a. All official college transcripts.
   b. Three letters of recommendation.
   c. Statement of goals.
   d. Resume (including list of relevant work experience and certifications).
   e. Example of written work, e.g., thesis, articles, reports, etc.

   The doctoral program coordinator may elect to conduct phone/video/email communication with applicants to obtain additional clarifying information.

International Students. International students must also meet Graduate Admissions requirements for international students. These requirements include:

1. Submission of Test of English as a Foreign Language (TOEFL) scores for applicants from people whose native language is not English. The minimum TOEFL score for admission to the program is 540.

2. Submit a Foreign Student Financial Statement. International students must document their ability to assume full responsibility for the cost of graduate education per Graduate School requirements.

Details on admissions can be found at the School of Graduate Studies and Research website.

Graduate Admissions: www.iup.edu/admissions/graduate/

For more information regarding Admission Classification and Provisional Admission for International Graduate Application, view the Graduate Catalog: www.iup.edu/gradcatalog

Safety Sciences Doctoral Education and Research Fee. All doctoral students will be charged a onetime doctoral education and research fee of $1,500 on entry to the program. This one-time nonrefundable fee will support the doctoral educational experiences.

Examples of resources supported by these fees are:

1. Guest speaker honorariums
2. Enhancement of technology resources used for instruction (including computer programs and software)
3. Student research support funds
4. Travel and expenses for students to present at regional and national conferences
5. Support the purchase of items to enhance classroom/facilities environment

Financial Assistance

Teaching Associates

A small number of advanced doctoral students may be accepted for Graduate Teaching Associate (TA) positions if opportunities are available. Such an assignment requires the student to teach two undergraduate classes per semester, usually at the freshmen or sophomore levels. Teaching Associates receives a salary for Fall and Spring semesters in which they teach and a summer tuition waiver of up to 9 credits. This is in lieu of the full tuition waiver provided with a graduate assistantship. Students serving as Teaching Associates must be enrolled for at least one graduate credit per semester of the teaching assignment. Contact the Doctoral Program Coordinator for more information.

Graduate Assistantships

The Department offers a limited number of assistantships to graduate students. Graduate students who have been admitted to the Ph.D. program are eligible for part-time graduate assistant support. Part-time graduate students work 10 hours weekly, receive a stipend and a tuition waiver. Assistantships for part-time students are awarded on criteria such as academic merit, financial need and skill sets that match potential assignments. Contact the Doctoral Program Coordinator for more information.

Additional information regarding financial aid opportunities can be found at:

www.iup.edu/admissions/graduate/financialaid/assistantships-and-scholarships/

Office of Financial Aid: www.iup.edu/financialaid/

Academic Advisement

The Doctoral Program Coordinator serves as the general advisor for all doctoral students. The advisor is responsible for assisting the student with the development and implementation of the Program of Studies Plan and providing advice/mentorship during the early stages of topic selection for dissertations. All students must complete their plan of study. This plan of study is designed to facilitate progress towards degree completion.

The advisor will help students plan their course schedule, select electives, approve transfer credits, and provide guidance with program requests in a timely fashion. The Doctoral Program Coordinator is an additional resource for discussion of University and Departmental policies and program requirements. The student maintains the responsibility for fulfilling program requirements, meeting deadlines, etc.

Students should interact with their advisor each semester prior to registering for course work. All changes in the student's Program of Studies Plan must be approved by the advisor before the student registers for classes.

In order to support early definition of dissertation topics, students (based on their academic interests) may also be assigned additional mentors after student discussion with the Doctoral Program Coordinator.

Campus Resources & Student Support

The School of Graduate Studies and Research: www.iup.edu/graduatestudies/
Graduate Catalog: www.iup.edu/gradcatalog
Office of the Bursar: www.iup.edu/bursar/
Office of the Registrar: www.iup.edu/registrar/
Disability Support Services: www.iup.edu/disabilitysupport/
Office of Social Equity: www.iup.edu/socialequity/
IUP Campus Library www.iup.edu/library/
MyIUP: www.iup.edu/myiup/
IT Support Center: www.iup.edu/itsupportcenter/
Veterans and Service Members: www.iup.edu/veterans/resource-center/
IUP Writing Center: www.iup.edu/writingcenter/
IUP Career and Professional Development Center: www.iup.edu/career/
IUP Parking Services and Visitor Center http://www.iup.edu/parking/
University Police http://www.iup.edu/police/ | 724-357-2141
Crisis Intervention 24/7 Hotline: 1-877-333-2470
Student Registration: www.iup.edu/registrar/students/registration/

IUP Email

IUP offers an email account to all active students. **Your IUP email address is the primary means by with the university will contact you with official information and you should use for all IUP official communications. It is your responsibility to check your IUP email regularly.** Visit www.iup.edu/itsupportcenter/howTo.aspx?id=23401 to learn more about setting up this account. For more information regarding University policy on email communication, view the Graduate Catalog: www.iup.edu/gradcatalog

Graduate Student Assembly

The Graduate Student Assembly (GSA) represents the graduate student body's interests at IUP and within the Indiana community. The GSA makes recommendations related University-wide and graduate-specific policies and in areas of concern in the cultural, intellectual, and social life of the part- and full-time graduate student. Visit www.iup.edu/graduatestudies/gsa for more information.

<div align="center">**Programs and Degrees**</div>

Doctoral Program

The Ph.D. program in Safety Sciences is a unique 54-credit hybrid distance education and summer workshop program of study. The Ph.D. in Safety Sciences program is based on a cohort model in which a student group is admitted every odd-numbered year into the degree program. The program requires a minimum of 54 semester hours of graduate credits. Each student must also satisfactorily complete a comprehensive written examination, an oral defense of their dissertation proposal, a dissertation, and an oral defense of their dissertation. The credits allocated for the program are as follows:

Required Course Work

Pedagogy Courses (6 semester hours)
SAFE 800	Pedagogical Practices in Safety Education	3 cr.
SAFE 808	Curriculum Evaluation in Safety Education	3 cr.

Advanced Applied Research Courses (9 semester hours)
SAFE 810	Applied Research I: Experimental Design	3 cr.
SAFE 811	Applied Research II: Multivariate Statistics	3 cr.
SAFE 812	Applied Research III: Tests and Measurements	3 cr.

Safety Management Courses (12 semester hours from the following list)
SAFE 802	Safety Management Systems	3 cr.
SAFE 804	Legal Aspects of Safety Sciences	3 cr.
SAFE 805	Strategies in Risk Control	3 cr.
SAFE 809	Human Performance and Organizational Safety Theory	3 cr.
SAFE 873	Disaster Preparedness	3 cr.

Technical Safety and Colloquium Courses (15 semester hours from the following list)
SAFE 801	Environmental Impact Assessment and Documentation	3 cr.
SAFE 803	Epidemiological Analysis in Safety Sciences	3 cr.
SAFE 806	Advanced Topics in Environmental Health and Safety	3 cr.
SAFE 807	Doctoral Colloquium in Safety Sciences	3 cr.
SAFE 814	Advanced Topics in Ergonomics	3 cr.
SAFE 815	Advanced Topics in Industrial Hygiene	3 cr.
SAFE 874	Fire Safety in Building Design	3 cr.

Dissertation (12 semester hours)
SAFE 995	Dissertation	1-12 cr.

Course Descriptions

SAFE 800: Pedagogical Practices in Safety Education   **3c-0l-3cr**
Application of educational theories to the safety educator role in higher education will be explored. The course will review of the role of the teacher in both the classroom and internship settings, teaching strategies, and student-centered learning outcomes as they pertain to safety sciences.
Prerequisites: None

SAFE 801: Environmental Impact Analysis and Documentation   3c-01-3cr
Using an environmental impact statement as a model, this course is designed to provide the student with various regulatory, scientific, mathematical, and risk-based approaches and tools to conduct environmental impact assessments for industrial technologies by analyzing affected environments and by determining the significant environmental consequences of industrial technologies on various resources (e.g., air, water, land, human health, etc.). The student is also provided with information on how to generate reports/forms based on implementing regulatory and other requirements to document information from environmental/risk assessments and analyses. Prerequisites: None

SAFE 802: Safety Management Systems   3c-01-3cr
This seminar examines administrative concepts and principles regarding organizing and managing safety performance within an organization. The course is designed to explore the current research topics in managing safety including: dimensions of safety performance, management systems, culture & climate, decision-making & risk, leader-member relations, attitudes and values, & international and cultural issues. The course focuses on identifying underlying theoretical and conceptual frameworks characterizing organizational safety research and helping students develop a sense of the issues and questions that the field addresses.
Prerequisites: None

SAFE 803: Epidemiological Analysis in Safety Sciences   3c-0l-3cr
Course will focus on epidemiological based test procedures commonly used in published safety research. Students will be required to formulate research hypotheses, test them using the appropriate quantitative research methodologies, and interpret results.
Prerequisites: None

SAFE 804: Legal Aspects of Safety Sciences   3c-0l-3cr
This course examines the legal framework within which the safety, health and environmental professional must perform. Consideration is given to the historical development of legal aspects of the profession, including current guidelines that impact on regulatory compliance and professional practice. Personal liabilities associated with professional practice, including the possibility of criminal sanctions for workplace injuries, are presented.
Prerequisites: None

SAFE 805: Strategies in Risk Control   3c-0l-3cr
Tools and strategies for the qualitative and quantitative assessment and management of environmental and occupational risks will be presented.
Prerequisites: None

SAFE 806: Advanced Topics in Environmental Health and Safety   3c-01-3cr
This course will present progressive topics in the environmental, health, and safety field. Leading edge applications in the areas of industrial hygiene, ergonomics, environmental safety, fire protection and safety management will be covered.
Prerequisites: None

SAFE 807: Doctoral Colloquium in Safety Sciences   3c-01-3cr
This graduate colloquium is designed to have the students work closely with their classmates and the instructor to explore and present various components of safety research. Colloquium students will

explore and present details of various research methods in order to gain valuable practice with research and technical presentations. Prerequisites: None

SAFE 808: Curriculum Evaluation in Safety Education 3c-0l-3cr

This course examines the various curriculum designs in safety at the undergraduate and graduate level. The student will analyze current accreditation standards in safety education with an emphasis on curriculum evaluation.   The students will learn methods for conducting ongoing curriculum revision based on a quality outcomes assessment plan.
Prerequisites: None

SAFE 809: Human Performance and Organizational Safety Theory 3c-0l-3cr

Presents advanced topics in the field of human performance and organizational safety theory. Evaluates human performance and organizational safety theory research methodology and research priorities. Applies safety theory and analytical, quantitative and qualitative tools to tackle large-scale or complex human performance and organizational safety behavioral issues. Covers and promotes leading edge research, analysis and discussion as defined by recent and relevant published research.
Prerequisites: None

SAFE 810: Applied Research I: Experimental Design 3c-01-3cr

Covers experimental and advanced multivariate statistical procedures, including analysis of variance (ANOVA), multivariate analysis of variance (MANOVA), analysis of covariance (ANCOVA), post-hoc tests, planned comparisons, and randomized block designs.
Prerequisite: None.

SAFE 811: Applied Research II: Multivariate Analysis 3c-0l-3cr

This course will explore multivariate analysis techniques commonly used in safety sciences research. Topics include multiple regression, exploratory and confirmatory factor analysis, and linear discriminant analysis.
Prerequisites: None

SAFE 812: Applied Research III: Tests and Measurements 3c-0l-3cr

Introduces students to testing and measurement topics as they specifically pertain to the field of occupational safety. Includes test validity and reliability, test and measurement interpretation, survey design and construction, sampling strategies and qualitative analysis of information. Describes the social, legal and ethical aspects of occupational safety testing.
Prerequisites: None

SAFE 814: Advanced Topics in Ergonomics 3c-0l-3cr

Presents advanced topics in the field of ergonomics (physical, cognitive, and organizational). Evaluates research methodologies and priorities. Provides expertise and analytical, quantitative and qualitative tools required to tackle complex ergonomic issues in the workplace. Covers and promotes leading edge research, analysis and discussions by reviewing and analyzing published research.

SAFE 815: Advanced Topics in Industrial Hygiene 3c-0l-3cr

Presents advanced topics in the field of industrial hygiene. Evaluates research methodologies and research priorities. Provides expertise and analytical, quantitative and qualitative tools required to tackle

8

complex industrial hygiene issues. Covers and promotes leading edge research, analysis and discussions by reviewing published research.

SAFE 873: Disaster Preparedness 3c-0l-3cr

Principles and techniques for preparing for various types of disasters. Students are acquainted with requirements to develop workable plans for natural and industrial types of disasters. Loss prevention measures are discussed and directed toward preservation of organization resources.
Prerequisite: SAFE Major or Permission of Instructor

SAFE 874: Fire Safety in Building Design 3c-0l-3cr

Examines the fundamental principles for the safe design of buildings from a fire hazard standpoint. Emphasis is given to an understanding of the building codes, fire properties of building materials, building design criteria to limit the spread of fire and smoke, control of ignition sources, storage of combustibles and flammables, life safety, and active fire protection systems.
Prerequisite: SAFE Major or Permission of Instructor

SAFE 995: Dissertation 1-12 cr

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Evaluation of Students

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For information regarding School of Graduate Studies and Research policies on grading, view the Graduate Catalog: www.iup.edu/gradcatalog

<u>**Comprehensive/Candidacy Examinations**</u>

This examination is given, usually upon the candidate's completion of course work, to determine the student's progress in the degree field and fields related to it and the student's likelihood of success in his/her research-dissertation phase. The examination may be written, oral, or both and is not necessarily limited to areas in which the candidate has taken course work. In addition to having written procedures for taking the comprehensive exam, departments must also have written procedures regarding providing feedback for comprehensive exams.

Please see below department-specific requirements for the Ph.D. in Safety Sciences comprehensive/candidacy examination.

Purpose and Description. The purpose of the comprehensive exam is to ensure that each student has achieved a fundamental knowledge base and can demonstrate an ability to accurately and appropriately apply that knowledge before proceeding to the relatively independent scholarship involved in dissertation research. Knowledge, integration, and application of scholarship are essential for successful scholarly work. Comprehensive examinations serve as developmental learning and assessment opportunities.

The comprehensive exam will consist of a <u>scholarly essay (constituting in most cases a research proposal) on a research topic of the students' choosing</u>. Polished academic writing is expected. A good comprehensive exam includes both review and integration of knowledge. Therefore, the student must formulate compelling and convincing arguments based on the scholarly knowledge and cite scholarly literature (i.e., peer reviewed articles) in the essay. The essay should demonstrate that the student knows,

understands, and can apply scholarly knowledge.

The completed exam must demonstrate the student's mastery and ability to apply concepts from the program's core courses. The exam must also demonstrate the student's knowledge and effective application of research methods.

The structure for each student's exam will be based on the judgment of the student's dissertation committee. A suggested structure is noted below as a general guide.

Exam Structure Guide. The exam will take the form of a preliminary, yet inclusive, <u>research proposal</u> where the student may choose to propose a qualitative, quantitative, or mixed methods study. Exam essays will then consist of two basic parts: (1) introduction and literature review; and (2) proposed methodology (showcasing experimental and statistical research methods). Each part may run approximately 15 to 20 pages culminating in a 30 to 40-page document excluding references. The exam must follow the most current APA publication style and include full bibliographic citations.

The first half of an exam essay will include an introduction that may also contain:
- a statement declaring the study as (1) quantitative, (2) qualitative, (3) mixed methods or (4) an evaluation
- a statement of the research problem
- a succinct research question or set of research questions, and
- a discussion outlining the study's significance and contribution to a specified body of knowledge.

The student is expected to present a literature review that addresses and integrates associated theoretical and scholarly perspectives thereby providing an overview of existing studies and foundational arguments relevant to the student's chosen research topic and demonstrating a working knowledge of the core topics presented throughout the program. This section of the essay will culminate in a synthesis of knowledge. Depending on the type of research (e.g., quantitative, qualitative, mixed methods or an evaluation), the student will locate the proposed research (1) within a conceptual framework, (2) within the context of defined theoretical gaps, contradictions, and/or predicaments relative to the research focus; (3) a preliminary concept map, and/or (4) a logic model. In all cases the student will discuss how the methods will integrate to illuminate results.

The second half of the exam essay addresses anticipated methods for the proposed study. This section will start off by discussing the pertinent perspectives or research paradigms and how they influence the student's proposed methods, research design, and rationale. The following methodological points also require discussion and justification relative to the student's chosen topic, introduction and literature sections, and proposed design:

1. Research proposal essays must address:
    a. The research design's overall strengths and limitations
    b. Potential data sources
    c. Sampling strategy including criteria and rationale
    d. Data collection plans
    e. Plans for analysis
    f. Ethical aspects of the study

g. Form of representation of findings

2. Essays focused on quantitative studies, certain mixed methods studies, and/or evaluations, as stipulated by the student's committee, should address:
    a. Identification of dependent and independent variables
    b. Measures of variables including scales, indices, and reliability and validity
    c. Validity issues of causes and effects

3. Essays focused on qualitative studies, certain mixed methods studies, and/or some evaluations, as stipulated by the student's committee, should address:
    a. Assurance of quality and credibility of the study

4. Essays focused on evaluations, as stipulated by the student's committee, should address:
    a. Identification of stakeholder groups and relevant stakeholder interests pertaining to the evaluation

Exam Procedures. To take the comprehensive exam, students should have completed all required coursework and have a dissertation committee approved by the doctoral coordinator. Students may then apply to take the comprehensive exam. Basic research, applied research, evaluation, policy and management research, or other types of safety studies as determined by the committee are acceptable. Note: Once all required course work is completed, students will need to begin to register for at least one dissertation credit (SAFE 995) in the fall and spring terms regardless of when the comprehensive examinations are taken.

The student must first meet with their committee to discuss their research idea. The research topic must be approved by the student's dissertation committee prior to starting the comprehensive exam. If, in the judgment of the committee, a different exam structure to the one noted above is deemed more valuable, a structure may be negotiated between the student and their committee as long as the comprehensive exam essay includes (1) a review of literature and (2) theoretical synthesis.

The committee will set the start date and the student will have two months (62 days) to complete their exam. Only once may the student request a one-month (31 days) extension from their designated committee two weeks prior to the due date.

Students may contact their committee members and request direction during the exam process. The student-committee relationship and interactivity should resemble that of the dissertation process.

Each student must submit their exam essay to their committee in MS-Word or in a form agreed upon by the committee. The dissertation committee members will read and evaluate the exam. Evaluation of the exam is based on the following criteria:

- Evidence of ability to apply knowledge: The student demonstrates a practical application of knowledge by citing examples, setting responses within an applied context, providing practical realistic problem solutions, and addressing related technical, scientific, political, social, organizational, and leadership nuances as appropriate.

- Evidence of ability to synthesize: The student demonstrates an ability to not simply report and analyze facts, but to integrate them as a supportive base and weave them through an innovative argument resulting in a logical cohesive formulation relative to the issues and questions at hand.
- Completeness and thoroughness: The student address all issues asked about in the question; each subpart given appropriate attention; uses specific detail and concrete examples to illustrate points; discusses alternative explanations regarding a line of discourse.
- Organization and clarity of writing: The student uses precise, clear statements throughout; well organized; one line of reasoning completed before another begins; well written.
- Conceptual clarity: The student incorporates relevant terminology from the field of safety as appropriate; demonstrates an understanding of the language of the field and an ability to think conceptually.
- Accuracy: The student demonstrates an accurate understanding of subject matter in question; accurately and appropriately draws on relevant research findings, conceptual schemes, theoretical paradigms, etc.

Exam Feedback. After the committee members read the exam, they will jointly meet with the student for an oral defense (of the proposal). This oral defense can occur on-line for students who are not local. Based on the consensus of the dissertation committee members, a comprehensive exam is graded as (1) pass, (2) conditional pass, (3) revise and resubmit, or (4) fail. See below information in the section Evaluation Outcome for Dissertation for additional information.

A "pass" would indicate that there is clear demonstration that the student's exam essay shows evidence of the ability to apply knowledge and to synthesize information, is complete, thorough, organized, logical, and accurate, and reflects clear writing and conceptual clarity.

A "conditional pass" would indicate that while most of the initial specified conditions have been met in the essay, the committee would like to see some modifications. In the event of a conditional pass, the committee will specify the modifications and any other time conditions in writing to the student. The committee members may choose to leave the final decision to the chair or request to review the modifications themselves. The student must meet the specified conditions in order to receive a pass.

However, in some cases, a grade decision may be "revise and resubmit." A revise and resubmit decision would typically reflect that the essay met some of the evaluation criteria and the committee saw strong evidence of potential success, but the essay contains substantial deficiencies that warrant revision in order for the student to demonstrate sufficient mastery of the relevant literature and adequate skills for dissertation work. In the event of a revise and resubmit decision, the student is provided with written feedback from the committee and has one month (31 days) from the time they receive all feedback from their committee to revise and resubmit the exam. The committee members may exercise their option to request the student to sit for another oral exam. The committee members then decide on a grade of pass, conditional pass, or fail based on the revised essay. A student may revise and resubmit only one time. However, they may receive a conditional pass multiple times provided forward progress is evidenced by the committee.

Students who "fail" the comprehensive exam are dismissed from the program. The committee chair must report all exam outcomes to the doctoral coordinator.

A student who does not meet due dates established by the committee is also subject to failure. A student

may, however, appeal to their committee for more time based on extenuating circumstances.

Program Level Examination Appeals

Appeals for Program Level Exams such as, candidacy, comprehensive, or qualifying examinations, are made to the dean of the School of Graduate Studies and Research (SGSR) based on policy and/or procedural violations. The appeal can be based only on policy and/or procedural violations; and not simply on the outcome of the examination. Procedural violations would be cases in which the program /department failed to follow program/department and/or University policies and/or procedures relating to the administration and/or evaluation of the exam.

The appeal must be made in writing to the dean of the School of Graduate Studies and Research. Documentation of the policy(ies)/procedures in question must be provided, along with a detailed description of the alleged violations(s). All evidence supporting the alleged violation should also be provided. The student must submit the written appeal to the dean of the SGSR within 30 days of receipt of the outcome of the examination.

Upon receipt of the written appeal to the dean of the SGSR, the dean will conduct an investigation of the allegation, review the documentation and render a final decision which completes the appeal process. The final decision rendered by the dean of the SGSR may not be appealed.

If it is found that policy/and/or procedure has been violated, the dean of the SGSR will instruct the program/department to allow the student to retake the exam, fully adhering to policy and procedures. In the event of a finding in support of the student allegation, the reexamination may not be counted as one of the attempts permitted under the University or Department's Reexamination Policy.

Reexamination Policy

No student is permitted a "third" examination without a recommendation to that effect from the degree program's sponsoring department per their adopted written procedures and the approval of the School of Graduate Studies and Research dean (or designee). Exceptions to this policy for programs can be made only with the approval of the School of Graduate Studies and Research. In the event a student does not successfully complete the comprehensive re-examination according to program requirements and the failure results in program dismissal, the program must notify the School of Graduate Studies and Research (SGSR) of the dismissal in writing. The SGSR will send an official notification of the dismissal to the student.

Degree Completion

The program requires a minimum of 54 semester hours of graduate credits with at least 12 credits associated with dissertation work. Each student must also satisfactorily complete a comprehensive written examination (research proposal), an oral defense of their dissertation proposal, a dissertation, and an oral defense of their dissertation. Additional aspects associated with the process of degree completion are provided below, including the completion of a research topic approval form.

Research Topic Approval Form (RTAF). In terms of timing, once the student has completed their comprehensive exam, they should prepare a scholarly, polished 1-2-page summary of the research topic, including the method of study, materials, any equipment that might be used, and an estimated time frame to complete the process. This process to submit the information is through an electronic RTAF. Note: A student may elect to prepare and have approved an RTAF prior to completion of comprehensive exam, but this could result in having to revise the RTAF based on comprehensive examination feedback. Regardless of when the RTAF is completed, students will still need to continue to register for at least one dissertation credit (SAFE 995) in each fall and spring term after required course work has been completed until they graduate.

The abstract (summary) should be an accurate, clear representation of the proposed study—an extended abstract of the proposal—that includes the nature and scope of the issue, a succinct summary of the literature, and the proposed method of study. It will be reviewed for approval by the program coordinator, the dean of the College of Health and Human Services, and the key administrators in the graduate school; therefore, it should be well-written, scholarly, fully referenced, and free of grammatical and spelling errors. The student should always have their dissertation chair review their summary before submission. Once the student has had their summary reviewed by their dissertation chair, and if the student has questions about the quality of his/her three-page summary, we recommend the student email an advance copy to the program coordinator who can provide additional feedback (if needed) prior to the official submission. **You may begin writing the dissertation after you receive written notice approving the research topic from the School of Graduate Studies and Research.**

Should changes occur, a new RTAF is required to be completed and approved by your committee and the School of Graduate Studies and Research. N**o student can graduate without an up-to-date RTAF on file with the Thesis/Dissertation Office.**

If the project requires review by either the university's Institutional Review Board for the Protection of Human Subjects (IRB) or the Institutional Animal Care and Use Committee (IACUC), final approval of the Research Topic Approval Form will not be forthcoming from the School of Graduate Studies and Research until either the IRB or IACUC has reviewed and approved the research project.

The School of Graduate Studies and Research requires you to file a Research Topic Approval Form **at least two academic terms** before you expect to graduate. If the form is not filed by the required deadline, the candidates' graduation will be delayed until the next semester.

It is the student's responsibility to ensure that their RTAF form is approved by the School of Graduate Studies and Research. Once the RTAF form is approved, the student should receive a letter of confirmation indicating approval. If the student does not receive that letter, it is up to the student to follow up and determine the status of the RTAF.

NOTE: The student cannot begin dissertation research activity beyond preliminary steps (such as background research, IRB/IACUC approved pilot study, or three-chapter writing/review) until notice of approval has been received from the School of Graduate Studies and Research. If RTAF approval is marked "conditional pending outside reader approval," the student may commence dissertation research, but cannot defend or graduate until the outside reader is approved.

Institutional Review Board (IRB). For any research involving human subjects, dissertation research proposals must be submitted to the Institutional Review Board (IRB) for review and approval **prior** to initiating any research. The IRB process is a requirement of the federal government and is in place to assure that human research subjects are protected from risks of harm or abuse in research.

You will need to submit to the IRB a proposed protocol for carrying out your dissertation research AND RECEIVE APPROVAL before engaging in any research (data collection) activities. Students should carefully read the IRB information, guidelines, forms, and submission deadlines available at http://www.iup.edu/irb/. Your RTAF will not be approved by the graduate school until your IRB proposal has cleared the IRB review process.

Securing IRB approval does not have to be a difficult or lengthy process. The following tips should assist you in moving easily through it:
- Read the directions very carefully and be sure that you follow them fully. (This includes numbering pages of the documents you attach to the form.) In developing your protocol narrative, be sure to address all the points indicated on the form. If a point is not applicable to you, state that rather than simply skipping the point.
- Be mindful of any potential ways in which you might have a "power-over" relationship with human subjects and be sure to address how you will protect against coercion.
- Include all related documents, such as a copy of recruitment letter, advertisements, surveys, interview guide, consent form, etc.
- Your committee chair will need to sign the IRB application so be sure to allow for enough time to make needed revisions based on your chair's feedback.
- Telephone surveys can be done. The IRB will expect that you will obtain consent over the phone and will ask you to include the 'script' of what you will say to introduce yourself, the study, inform the participant of their rights and obtain their consent. Include this script as an appendix to the form.
- Consider the readability and accessibility of the language in your consent forms, scripts, and data collection instruments, ensuring that the language matches characteristics of your sample.
- If you have a tricky or unusual element to your study, consider requesting an advance meeting for you and Chair with the IRB Chair to get suggestions on how best to address these challenges.
- Be aware of IRB Committee schedules and deadlines for submitting your materials (usually, 10 days in advance of a review.) A calendar of IRB deadlines and meetings is available at the IUP School of Graduate Studies and Research web site.
- Your IRB protocol may receive an expedited review if your study qualifies (see the IRB Protocol guidelines for more details), but in the case it does require a full board review *you must attend the hearing with your committee chair.* (Attendees you are not local can attend via the internet.) Members of the IRB will share their questions and concerns with you directly, allowing you the opportunity to respond. They may also offer suggestions to help you address ethical issues responsibly. You will also be able to make any necessary revisions immediately following the review and feedback and resubmit it to the IRB, allowing you to begin your research more quickly.

The School of Graduate Studies and Research has (1) established deadlines for submitting research topic approval forms and submitting dissertations, (2) established deadlines and process for applying for

graduation, and (3) provided student forms for their completion relative to dissertation process which are available on their website www.iup.edu/graduatestudies/

Dissertation Completion

Upon acceptance of the dissertation by the dissertation advisor, the candidate shall then request a formal meeting of the dissertation committee for a formal dissertation defense. The meeting will be scheduled at a time convenient to all committee members. The candidate must place the dissertation in the hands of all committee members at least two weeks in advance of the scheduled dissertation defense. The student will be required to defend the completed dissertation during an oral examination conducted by the dissertation committee. This oral examination does not have to be conducted in person, although it is preferred. It is the responsibility of the student to electronically arrange for the oral defense if conducted on-line. During the defense the candidate is expected to respond to substantive and methodological questions related to the dissertation. The dissertation defenses are open to members of the University community.

Evaluation Outcome for Dissertation and/or Thesis

The dissertation must be approved in writing by each member of the committee, as well as by the School of Graduate Studies and Research. Results from the dissertation defense can include pass the defense, fail the defense, or pass the defense based upon required revisions.

A "pass the defense" result indicates that the dissertation has successfully addressed the research questions posed, showing clear evidence of the ability to apply knowledge and to synthesize information, is complete, thorough, organized, logical and accurate, and reflects clear writing and conceptual clarity.

A "fail the defense" result indicates that there are major structural deficiencies in the dissertation that cannot be corrected through revisions, resulting in the dissertation not successfully addressing research questions posed. These deficiencies could be in areas such as flawed experimental design, insufficient or incorrect information collection and analysis, and unsubstantiated or illogical findings and conclusions.

A "pass the defense based upon required revisions" result indicates that the dissertation successfully has addressed the research questions posed but its quality could be improved, through revision, in one or more of the following areas: completeness, thoroughness, organization, accuracy, clear writing and conceptual clarity.

Effective fall 2017 for students admitted and students admitted after -- Dissertation and thesis credits will be assigned Pass or Fail as the final evaluation outcome for the taken credits and carry no quality points weighted towards a student's CGPA.

Ongoing Dissertation and Thesis students admitted "prior" to fall 2017 – Dissertation and thesis credits will be assigned a letter grade as the final evaluation outcome for the credits taken and carry quality points weighted towards a student's CGPA for the number of dissertation credits required for the program. "Extended" dissertation credits are not calculated into a student's CGPA.

For more information, view the view the Graduate Catalog: www.iup.edu/gradcatalog

University Policies and Procedures

University policy is the baseline policy. Programs may have policy that is more stringent than the University baseline policy; however, not less stringent than the University baseline policy. For questions regarding this statement, please contact Ph.D. in Safety Sciences Program Coordinator or the School of Graduate Studies and Research.

Academic Calendar
View the IUP Academic Calendar: www.iup.edu/news-events/calendar/academic/

The following University and SGSR policies can be found at www.iup.edu/gradcatalog

Academic Good Standing
www.iup.edu/gradcatalog

Academic Integrity
www.iup.edu/gradcatalog
The Source: A Student Policy Guide: www.iup.edu/studentconduct/thesource/

Bereavement-Related Class Absences
www.iup.edu/gradcatalog

Continuous Graduate Registration for Dissertation and Thesis
www.iup.edu/gradcatalog

Grade Appeal Policy
www.iup.edu/gradcatalog

Graduate Fresh Start Policy
www.iup.edu/gradcatalog

Graduate Residency Requirement
www.iup.edu/gradcatalog

Leave of Absence Policy
www.iup.edu/gradcatalog

Time Limitations
www.iup.edu/gradcatalog

Time-to-Degree Masters/Doctoral Dismissal Appeal Policy
www.iup.edu/gradcatalog

Time-to-Degree Extension for Master's Thesis and Doctoral Dissertation
www.iup.edu/gradcatalog

Transfer of Credits Policy

www.iup.edu/gradcatalog

Department Transfer of Credits Policy. A student may transfer nine (9) graduate credits from another institution, with Safety Sciences Department approval, for the graduate student's program at IUP. These graduate courses must have been taken from a regionally accredited institution, within the past five years, and the grade earned must be a "B" or its equivalent or better. The time limitation rule and residency requirements pertain without modification due to transfer credits. M.S.-credits from dual listed IUP M.S./Ph.D. Safety Sciences courses will be accepted for transfer into the Ph.D. Program.

Research

There are resources available to assist students in conducting research and writing dissertations. This information is available at: www.iup.edu/graduatestudies/resources-for-current-students/research/

Addition information on conducting research at IUP is available at:
www.iup.edu/gradcatalog
www.iup.edu/research/

Signature Page

My signature below indicates that I am responsible for reading and understanding the information provided and referenced in this department/program student handbook.

_____ [please initial] I understand my program coordinator may share this document with the School of Graduate Studies and Research.

_____
Print Name

_____
Signature

_____
Date

Submit to Ph.D. in Safety Science Program Coordinator by July 31, 2020.

The Department of Safety Sciences will keep this signed document on file.