

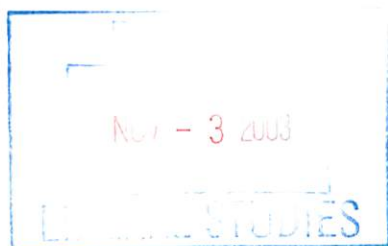
LSC Use Only No:	LSC Action-Date:	UWUCC USE Only No.	UWUCC Action-Date:	Senate Action Date:
		03-20a	Apr 11/18/03	Apr 12/2/03

Curriculum Proposal Cover Sheet - University-Wide Undergraduate Curriculum Committee

Contact Person Dr. Art Hulse	Email Address ntcc
Proposing Department/Unit Biology	Phone 72279

Check all appropriate lines and complete information as requested. Use a separate cover sheet for each course proposal and for each program proposal.

1. Course Proposals (check all that apply) <input type="checkbox"/> New Course <input type="checkbox"/> Course Prefix Change <input type="checkbox"/> Course Deletion <input type="checkbox"/> Course Revision <input type="checkbox"/> Course Number and/or Title Change <input type="checkbox"/> Catalog Description Change	
<hr/> Current Course prefix, number and full title Proposed course prefix, number and full title, if changing	
2. Additional Course Designations: check if appropriate <input type="checkbox"/> This course is also proposed as a Liberal Studies Course. <input type="checkbox"/> Other: (e.g., Women's Studies, Pan-African) <input type="checkbox"/> This course is also proposed as an Honors College Course.	
3. Program Proposals <input type="checkbox"/> New Degree Program <input type="checkbox"/> Program Title Change <input checked="" type="checkbox"/> Program Revision <input type="checkbox"/> New Minor Program <input type="checkbox"/> New Track	
<hr/> B.A. in Biology Current program name Proposed program name, if changing	
4. Approvals	
Department Curriculum Committee	<i>Art Hulse</i> 3-14-03
Chair(s)	
Department Chair(s)	<i>Art Hulse</i> 3/14/03
College Curriculum Committee Chair	<i>[Signature]</i> 10/03/03
College Dean	<i>Janet Sech</i> 10/03/03
Director of Liberal Studies *	
Director of Honors College *	
Provost *	
Additional signatures as appropriate: (include title)	
UWUCC Co-Chairs	<i>Gail Sechrist</i> 11-18-03



PART II. Description of Curriculum Change

1 - Catalog Description for the Revised Bachelor of Arts degree in Biology

Program Revision – B. A. degree in Biology

Liberal Studies: As outlined in Liberal Studies section with the following Specifications: **48 cr**
Mathematics: MATH 121 or MATH 217
Natural Sciences: CHEM 111 – 112
Liberal Studies Electives: 3 cr

Major: 32cr

Required Courses:	4	
BIOL 111	Principles of Biology I	4cr
BIOL 112	Principles of Biology II	4cr
BIOL 210	Botany	3cr
BIOL 220	General Zoology	3cr
BIOL 250	Principles of Microbiology	3cr
BIOL 263	Genetics	3cr

Controlled Electives: (BIOL majors courses only)
 12sh(1)

Other Requirements: 23-24cr

PHYS 111 (3cr)
 PHYS 121 (1cr)

Ancillary Science Courses:

An additional 4 to 5 credits in ancillary sciences to be selected from the following: (2,3)

BIOC: 301, 302, 311, 312

CHEM: 231, 232, 321, 323, 351

GEOS: 121 and 122, 131 and 132, 141, 310, 330, 331, 361

MATH: 122, 216, 217, 418, 417

PHYS: 112 and 122, 151

Planned Program in Complementary Field (Advisor approval required). 15sh of course work in the field with at least 6sh in 300/400 level courses. (4)

Foreign Language: (5) 0-6cr

Free Electives: 10-17 cr

Total Degree Requirement:**120cr**

- (1) No more than 6cr total from Independent Study BIOL 482, Special Topics BIOL 281 or 481 or Internship BIOL 493 applies to major: excess applied as free electives.
- (2) Four cr if the student elects MATH 121 in Liberal Studies or 5 cr if the student elects MATH 217.
- (3) Other appropriate majors courses in these departments may be substituted for one or more of those on the above list with the approval of the student's advisor.
- (4) Recommended complementary fields include: Anthropology, Art, Business, Chemistry, Communications Media, Computer Science, Criminology, Dietetics, Economics, English, Foreign Language, Geography, Geoscience, Journalism, Mathematics, Philosophy, Physics, Political Science, Psychology, Regional Planning, or Safety Science. Some courses in complementary fields may also fulfill Liberal Studies requirements (See Liberal Studies Section). However if complementary field selected is Chemistry, Geoscience, Mathematics or Physics courses used to fulfill the ancillary science requirement above may not be applied to the complementary field requirement of 15cr.
- (5) Two courses beyond placement or intermediate level.

Current Program:

Bachelor of Arts – Biology

Liberal Studies: As outlined in Liberal Studies section with the following specifications:

Mathematics: MATH 121 or 217

Natural Science: CHEM 111-112

Liberal Studies Electives: 3cr, PHYS 111, no courses with BIOL prefix

Major:

Required Courses:

BIOL 111 Principles of Biology I

BIOL 112 Principles of Biology II

BIOL 210 Botany

BIOL 220 General Zoology

BIOL 250 Principles of Microbiology

BIOL 263 Genetics

Controlled Electives:

Biology electives (major courses only)

Other Requirements:

PHYS 121 Physics I Lab

Ancillary Science Courses:

An additional 4-5 cr from the following (2,3):

BIOC: 301, 302, 311, 312

CHEM: 231, 232, 321, 323, 351

GEOS: 121 and 122, 131 and 132, 141, 310, 330, 331, 361

MATH: 122, 216, 217, 417, 418

PHYS: 112 and 122, 151

Planned Program in Complementary Field (requires advisor approval) with at least 6cr in 300/400 level courses (4)

Other Requirements:

Foreign Language Intermediate Level

Free Electives:

Total Degree Requirements:

- (1) No more than 6cr total from Independent Study, Special Topics or Internship applies to major; excess applied as free electives.
- (2) If MATH 121 (4cr) is elected as the Liberal Studies MATH course the additional requirement is 4 hours, if MATH 217 (3cr) is elected the additional requirement is 5 hours.
- (3) Other appropriate major courses in the above departments may be substituted for one or more of those on the above list with the approval of the student's advisor.
- (4) Recommended complementary fields include: Anthropology, Art, Business, Chemistry, Communications Media, Computer Science, Criminology, Dietetics, Economics, English, Foreign Language, Geography, Geoscience, Journalism, Mathematics, Physics, Political Science, Psychology, Regional Planning, or Safety Science. Some courses in complementary field may also fulfill Liberal Studies requirements (see Liberal Studies section). However if complementary field selected is Chemistry, Geoscience, Mathematics or Physics courses used to fulfill the ancillary science requirement above may not be applied to the complementary field requirement of 15sh
- (5) Two courses beyond placement or intermediate level.

Proposed Program:

Bachelor of Arts – Biology

48 Liberal Studies: As outlined in Liberal Studies section with the following specifications:

Mathematics: MATH 121 or 217

Natural Science: CHEM 111-112

Liberal Studies Electives: 3cr, no courses with BIOL prefix

Major:

Required Courses:

BIOL 111 Principles of Biology I

BIOL 112 Principles of Biology II

BIOL 210 Botany

BIOL 220 General Zoology

BIOL 250 Principles of Microbiology

BIOL 263 Genetics

Controlled Electives:

Biology electives (majors courses only)

Other Requirements:

PHYS 111 Physics I Lecture

PHYS 121 Physics I Lab

Ancillary Science Courses:

An additional 4-5 cr from the following (2,3):

BIOC: 301, 302, 311, 312

CHEM: 231, 232, 321, 323, 351

GEOS: 121 and 122, 131 and 132, 141, 310, 330, 331, 361

MATH: 122, 216, 217, 417, 418

PHYS: 112 and 122, 151

Planned Program in Complementary Field (requires advisor approval) with at least 6cr in 300/400 level courses (4)

Other Requirements:

Foreign Language Intermediate Level

Free Electives:

Total Degree Requirements:

- (1) No more than 6cr total from Independent Study, Special Topics or Internship applies to major; excess applied as free electives
- (2) If MATH 121 (4cr) is elected as the Liberal Studies MATH course the additional requirement is 4 hours, if MATH 217 (3cr) is elected the additional requirement is 5 hours.
- (3) Other appropriate major courses in the above departments may be substituted for one or more of those on the above list with the approval of the student's advisor.
- (4) Recommended complementary fields include: Anthropology, Art, Business, Chemistry, Communications Media, Computer Science, Criminology, Dietetics, Economics, English, Foreign Language, Geography, Geoscience, Journalism, Mathematics, Physics, Political Science, Psychology, Regional Planning, or Safety Science. Some courses in complementary field may also fulfill Liberal Studies requirements (see Liberal Studies section). However if complementary field selected is Chemistry, Geoscience, Mathematics or Physics courses used to fulfill the ancillary science requirement above may not be applied to the complementary field requirement of 15sh
- (5) Two courses beyond placement or intermediate level.

b) List of all Associated Course Changes (new or revised courses, number, title, or description changes, and deletions)

Revised Courses with New Titles, Numbers or Descriptions

None

New Courses

None

Existing Course Additions

- Allows for substitution of MATH 217(Probability and Statistics) for MATH 121 (Calculus I) at the students option
- PHYS 111 and 121 (Physics I Lecture and Laboratory)
- Addition of a “Planned Complementary Field” 15sh
- Addition of a suite of “Ancillary Science Courses” may select from for 4 or 5sh

Course Deletions

- Reduces Liberal Studies Electives from 9sh to 3sh
- Removal of CHEM 231 (Organic Chemistry 1) and CHEM 351 (Biochemistry) from absolute requirements and incorporates them into the suite of “Ancillary Science Courses” that the student may chose from

3. Rationale for Change

Over-all introduction of rationale. Biology is a field that is rapidly developing and diversifying in part due to the advent of new technologies. It is also unique among all of the natural sciences in its heavy reliance on information from other natural science disciplines. An appropriate education in Biology (the study of life) requires not only a concentrated body of knowledge in the life sciences but also a strong grounding in other sciences. The traditional approach to meeting the need for of other sciences in Biology Programs has been for the student to take a fairly static selection of courses from Mathematics, Physics, and Chemistry. This “one-size-fits-all” system no longer meets the demands of all biology majors. While many students are best served by the traditional approach others are not. Because of this the Department of Biology has decided to revise its B.A. program as well as its B.S. program to better meet the needs of all of our students.

To this end we have modified the suite of ancillary sciences that our students can be required to take as well as requiring a complementary field of study for our majors in the Bachelor of Arts program. The following addresses the rationale for each of the specific changes in the revised program.

- **Inclusion of Physics I Lecture and Laboratory as a requirement.** In the present B. A. in Biology the students are not required to take a course in Physics. The new program requires that the student take PHYS 111 and 121. We feel that a basic understanding of Physics is necessary for a Biology major. The ideal situation, to meet the needs of our majors, would be to have a one semester Physics course tailored to the needs of Biology students. Unfortunately such a course does not at present exist. As a result PHYS 111 and 121 are the logical courses to meet the requirements of our majors.
- **Mathematics option.** In our old program all B. A. students were required to take MATH 121 (Calculus 1). In the revision the students have the option of taking either MATH 121 or MATH 217 (Probability and Statistics). The reason for the inclusion of MATH 217 as an option is that Biology is, to a large degree, a probabilistic science and most biological data undergoes statistical analysis of one sort or another. As a consequence for many, but certainly not all, students a firm grounding in statistical methods and analysis is more appropriate than an introductory course in Calculus.
- **Inclusion of CHEM 231 and 351 in a suite of “Ancillary Sciences Courses.** CHEM 231 and 351 have been removed as absolute requirements for the B. A. in Biology revision, but have not been completely removed from the program. Rather they have been placed as electives with a number of other courses in the “Ancillary Science Courses” requirement for the revised program. This move again reflects the fact that while students in the Biological Sciences require a strong background in other scientific disciplines a “one size fits all” approach is not appropriate.
- **Inclusion of the large number of ancillary courses.** The Department of Biology recognizes the fact that Biological Sciences is a diverse field and that a one-size fits all approach to ancillary sciences is not going to serve the needs of a diverse group of majors. Courses that may be appropriate for a student interested in Cell Biology or Molecular Genetics would not necessarily be appropriate for a student that was interested in Ecology, Behavior, or specific taxon related fields such as Entomology or Herpetology. As a result we have greatly expanded the number of courses that our majors may select from to meet their Ancillary Science requirements
- **Inclusion of the Complementary Fields.** A major advantage of the B.A. degree over the B. S. degree is the greater degree of latitude that student has in pursuing studies in fields that compliment the major. To further this advantage we have included in the revised B. A. degree a requirement that each student must take a minimum of 15 sh in a complementary field of study. The number of complementary fields that the student may select from is large in number and

diverse in subject. This reflects the incredible diversity within the biological sciences. In many of the complementary fields fifteen semester hours of course work will qualify our students for a minor within that field. Among these are Anthropology, Computer Science, Economics, English, Nutrition, Physics and Political Science. An additional one to three hours above the required 15 for the complementary field would qualify our students for minors in several additional complementary fields. Among these are: Applied Statistics, Criminology, Geology, Journalism, Mathematics, Psychological Science and Safety Science. With the number of free electives within the program a student could opt to pursue a double major in many of the complementary fields or obtain two rather than one minor.

PART III. Implementation

1- How will the proposed revision effect students already in the existing program?

Changes will not effect students in the existing program unless they elect to enter the new program. This would most likely only occur in students entering their Sophomore year

2- Are faculty resources adequate?

Faculty resources are adequate within the Department of Biology since there is no change in BIOL course requirements. Other departments may see a slight increase in students enrolled in their courses due to the additional requirement of a complementary field and the addition of PHYS 111 and 121 into the program. There may be a slight reduction in number of students taking CHEM 231 and 351 due to the fact that these will no longer be absolute requirements. All departments have been notified of our program revisions (see attached letters).

3. Are other resources adequate?

Other resources are expected to be adequate.

4. Do you expect an increase or decrease in the number of students as a result of these revisions? If so how will the department adjust?

It is our hope that the proposed revision will make the Bachelor of Arts degree more attractive to potential students. However we do not expect such an inordinately large influx of students as to affect the operations of either the Department of Biology or any department associated with the complementary fields.

PART IV. Periodic assessment

We plan a two-pronged method of evaluation of the program. This will involve a survey of graduating seniors as well as a five-year evaluation of the program by the Department of Biology.

Upon submission of their graduation application to their advisors students will be given a Senior Survey that they will be required to complete and return to their advisor in a sealed envelope bearing the letter head of the Department of Biology. These sealed envelopes will be given to the department secretary and not opened until after graduation (either Fall or Spring). The department secretary will then transcribe the results and distribute the results to the entire faculty of the Department of Biology. If students so chose they may identify themselves on the survey form for follow-up interviews by phone or e-mail.

At the end of the first five years of the program and every five years after that the Undergraduate Curriculum Committee of the Department of Biology will evaluate all of the Senior Surveys for the last five years. In addition enrollment trends during each five year period will be examined and included in the evaluation. All faculty within the Department of Biology will also be asked to submit their individual evaluations regarding the success of the program

PART V. Course proposals

Not applicable, no new courses are being proposed

PART VI. Letters of support or acknowledgement

See the attached letters of notification and acknowledgement.

APPENDIX

LETTERS OF NOTIFICATION AND RESPONSES

03-20a

APPENDIX

LETTERS OF NOTIFICATION AND RESPONSES

Art Hulse

From: "Art Hulse" <ntcc@iup.edu>
To: "Dr. Roger Smith" <RSMITH@iup.edu>
Sent: Thursday, January 23, 2003 10:40 AM
Attach: BA Program Revision.doc
Subject: BA in Biology program revision

Dear Dr. Smith:

The Department of Biology is in the process of revising its Bachelor of Arts degree in Biology. Some of our revisions have the potential to impact your department. I wanted to inform you of these changes and solicit your comments relative to the changes. I have attached a copy of the Proposed Revision for you to examine.

The major change that might impact your department is that we are going to require that all B. A. – Biology students must take 15 credit hours in a complementary field of study. We have listed a large number of complementary fields (see attached proposal). One of the complimentary fields of study is Foreign Languages. As a consequence of this you may have additional Biology majors enrolling in your courses. I would greatly appreciate your comments on this proposal.

Sincerely yours,

Arthur C. Hulse,
Chair, Curriculum Committee

Art Hulse

From: "roger smith" <rsmith@iup.edu>
To: "Arthur Hulse" <ntcc@iup.edu>
Cc: "roger smith" <rsmith@iup.edu>
Sent: Thursday, January 23, 2003 2:19 PM
Subject: Curriculum proposal

Dear Dr. Hulse,

Thank you for the copy of the proposed change in the Biology Curriculum. I have made this available to the faculty in my dept. as well as to David Foltz, Chair of the Dept. Curriculum Comm. we will forward to you the comments from the Spanish Dept.

Cordially,
Roger Smith, Chair

Art Hulse

From: "Art Hulse" <ntcc@iup.edu>
To: "Dr. Steve Jackson" <SJACKSON@iup.edu>
Sent: Thursday, January 23, 2003 10:44 AM
Attach: BA Program Revision.doc
Subject: BA in Biology program revision

Dear Steve:

The Department of Biology is in the process of revising its Bachelor of Arts degree in Biology. Some of our revisions have the potential to impact your department. I wanted to inform you of these changes and solicit your comments relative to the changes. I have attached a copy of the Proposed Revision for you to examine.

The major change that might impact your department is that we are going to require that all B. A. – Biology students must take 15 credit hours in a complementary field of study. We have listed a large number of complementary fields (see attached proposal). One of the complimentary fields of study is Political Science. As a consequence of this you may have additional Biology majors enrolling in your courses. I would greatly appreciate your comments on this proposal.

Sincerely yours,

Arthur C. Hulse,
Chair, Curriculum Committee

Art Hulse

From: "Steve Jackson" <sjackson@iup.edu>
To: "Art Hulse" <ntcc@iup.edu>
Sent: Thursday, January 23, 2003 11:01 AM
Subject: RE: BA in Biology program revision

Dear Art:

I quickly reviewed the language and it looks appropriate. The Department of Political Science supports the revision. A strong concentration in political science would probably include the following classes as appropriate to a "public health" approach:

PLSC101 World Politics (deals with AIDS, food aid, international relief organizations)

PLSC111 American Politics

PLSC250 Public Policy (health and biological-related issues included)

PLSC370 Introduction to Public Administration (health-related bureaucracies)

PLSC321 International Organizations (including health-related international bureaucracies such as the WHO and FAO).

--Steve

Steven F. Jackson, Ph.D.
 Associate Professor and Chair
 Department of Political Science
 Indiana University of Pennsylvania
 103 Keith Hall Annex
 390 Pratt Drive
 Indiana PA 15705-1069
 voice: (724) 357-2290
 fax: (724) 357-6478
 New E-Mail Address: sjackson@iup.edu
<http://www.chss.iup.edu/ps/>

-----Original Message-----

From: Art Hulse [mailto:ntcc@iup.edu]
Sent: Thursday, January 23, 2003 10:45 AM
To: Dr. Steve Jackson
Subject: BA in Biology program revision

Dear Steve:

The Department of Biology is in the process of revising its Bachelor of Arts degree in Biology. Some of our revisions have the potential to impact your department. I wanted to inform you of these changes and solicit your comments relative to the changes. I have attached a copy of the Proposed Revision for you to examine.

The major change that might impact your department is that we are going to require that all B. A. – Biology students must take 15 credit hours in a complementary field of study. We have listed a large number of complementary fields (see attached proposal). One of the complimentary fields of study is Political Science. As a consequence of this you may have additional Biology majors enrolling in your courses. I would greatly appreciate your comments on this proposal.

Sincerely yours,

Arthur C. Hulse,
 Chair, Curriculum Committee

Art Hulse

From: "Art Hulse" <ntcc@iup.edu>
To: "Steve Jackson" <SJACKSON@iup.edu>
Sent: Friday, January 24, 2003 9:49 AM

Steve:

Again many thanks for the speedy reply and for your suggestions for appropriate courses. I will put them into a document for our advisors to use when discussing complementary fields and courses with their advisees. What courses would you recommend for students that had a more environmental interest rather than a health related interest?

Best wishes,

Art

Art Hulse

From: "Steve Jackson" <sjackson@iup.edu>
To: "Art Hulse" <ntcc@iup.edu>
Sent: Friday, January 24, 2003 9:59 AM
Subject: RE:

They would pretty much be the same courses; in each case they touch upon issues of public health and environmental protection, though it varies by instructor and year as to what is "hot." On an informal basis, advising students to take courses with Dr. Susan Martin for environmental issues is a good idea since she worked for the DEP for many years.
--Steve

-----Original Message-----

From: Art Hulse [mailto:ntcc@iup.edu]
Sent: Friday, January 24, 2003 9:50 AM
To: Steve Jackson
Subject:

Steve:

Again many thanks for the speedy reply and for your suggestions for appropriate courses. I will put them into a document for our advisors to use when discussing complementary fields and courses with their advisees. What courses would you recommend for students that had a more environmental interest rather than a health related interest?

Best wishes,

Art

Art Hulse

From: "Art Hulse" <ntcc@iup.edu>
To: "Dr. Robert Sechrist" <RPSECRST@iup.edu>
Sent: Thursday, January 23, 2003 10:41 AM
Attach: BA Program Revision.doc
Subject: BA in Biology program revision

Dear Dr. Sechrist:

The Department of Biology is in the process of revising its Bachelor of Arts degree in Biology. Some of our revisions have the potential to impact your department. I wanted to inform you of these changes and solicit your comments relative to the changes. I have attached a copy of the Proposed Revision for you to examine.

The major change that might impact your department is that we are going to require that all B. A. – Biology students must take 15 credit hours in a complementary field of study. We have listed a large number of complementary fields (see attached proposal). One of the complimentary fields of study is Geography and Regional Planning. As a consequence of this you may have additional Biology majors enrolling in your courses. I would greatly appreciate your comments on this proposal.

Sincerely yours,

Arthur C. Hulse,
Chair, Curriculum Committee

Art Hulse

From: "Robert Sechrist" <rpsecrest@iup.edu>
To: "Art Hulse" <ntcc@iup.edu>
Sent: Thursday, January 23, 2003 2:49 PM
Attach: ATT00007.eml
Subject: RE: BA in Biology program revision

The geography and regional planning support your revisions.

Art Hulse

From: "Art Hulse" <ntcc@iup.edu>
To: "Dr. Susan Dahlheimer" <SSDAHL@iup.edu>
Sent: Thursday, January 23, 2003 10:23 AM
Attach: BA Program Revision.doc
Subject: BA in Biology program revision

Dear Dr. Dahlheimer:

The Department of Biology is in the process of revising its Bachelor of Arts degree in Biology. Some of our revisions have the potential to impact your department. I wanted to inform you of these changes and solicit your comments relative to the changes. I have attached a copy of the Proposed Revision for you to examine.

The major change that might impact your department is that we are going to require that all B. A. – Biology students must take 15 credit hours in a complementary field of study. We have listed a large number of complementary fields (see attached proposal). One of the complimentary fields of study is Food and Nutrition. As a consequence of this you may have additional Biology majors enrolling in your courses. I would greatly appreciate your comments on this proposal.

Sincerely yours,

Arthur C. Hulse,
Chair, Curriculum Committee

Art Hulse

From: "Susan Dahlheimer" <ssdahl@iup.edu>
To: "Art Hulse" <ntcc@iup.edu>
Sent: Sunday, February 09, 2003 3:25 PM
Subject: Re: BA in Biology program revision

I forgot to add that you might want those preparing to pursue food technology to take the new food safety course being developed in your department.

----- Original Message -----

From: [Art Hulse](#)
To: [Susan Dahlheimer](#)
Sent: Friday, January 24, 2003 10:22 AM
Subject: Re: BA in Biology program revision

Thank you very much for your speedy reply. I will change the name from Dietetics to Food and Nutrition. If you could at some time provide me with a list of those courses most appropriate for our majors to take I would greatly appreciate it. I want to put together an advising handout for incoming students.

Best wishes,

Art Hulse

----- Original Message -----

From: [Susan Dahlheimer](#)
To: [Art Hulse](#)
Sent: Friday, January 24, 2003 10:06 AM
Subject: Re: BA in Biology program revision

Our department will be happy to accommodate any biology majors who would like to take our courses; their science background will be excellent preparation. We would particularly recommend this path to anyone interested in a medical/allied health career. I notice that you list this option as "dietetics", which really refers to our professional degrees. This should be changed to either "nutrition", which is the title of our minor or "food and nutrition", our department title. Let me know if we can be of any assistance.

----- Original Message -----

From: [Art Hulse](#)
To: [Dr. Susan Dahlheimer](#)
Sent: Thursday, January 23, 2003 10:23 AM
Subject: BA in Biology program revision

Dear Dr. Dahlheimer:

The Department of Biology is in the process of revising its Bachelor of Arts degree in Biology. Some of our revisions have the potential to impact your department. I wanted to inform you of these changes and solicit your comments relative to the changes. I have attached a copy of the Proposed Revision for you to examine.

The major change that might impact your department is that we are going to require that all B. A. – Biology students must take 15 credit hours in a complementary field of study. We have listed a large number of complementary fields (see attached proposal). One of the complimentary fields of study is Food and Nutrition. As a consequence of this you may have additional Biology majors enrolling in your courses. I would greatly appreciate your comments on this proposal.

Sincerely yours,

Arthur C. Hulse,
 Chair, Curriculum Committee

Art Hulse

From: "Susan Dahlheimer" <ssdahl@iup.edu>
To: "Art Hulse" <ntcc@iup.edu>
Sent: Sunday, February 09, 2003 2:22 PM
Subject: Re: BA in Biology program revision

Sorry to be so slow in responding. Our faculty discussed courses appropriate for the biology major in our faculty meeting. Currently, the minor is: FDNT 212, 213, 355 (physiol prereq that can be waived due to strong bio background), and two of the following: 245, 402, and 470. However, because of the strong science background, we would suggest that those interested in nutrition (perhaps those who might teach or pursue careers in health care) take 212, 213, 355, 458 (biochem prereq), and one of the following: 245, 402, 470 or 455, depending on student interest. We also considered that your students might be interested in pursuing more work in micro, food science/technology. For those students we would suggest FDNT 150/151, 212, 362, 458, and one other course of the student's choice from those listed above. Either option could become a declared minor if that's what you're looking for and we get formal approval. Please let me know if you would like us to take further action.

----- Original Message -----

From: [Art Hulse](#)
To: [Susan Dahlheimer](#)
Sent: Friday, January 24, 2003 10:22 AM
Subject: Re: BA in Biology program revision

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Best wishes,

Art Hulse

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To: [Art Hulse](#)
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Subject: Re: BA in Biology program revision

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From: [Art Hulse](#)
To: [Dr. Susan Dahlheimer](#)
Sent: Thursday, January 23, 2003 10:23 AM
Subject: BA in Biology program revision

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The major change that might impact your department is that we are going to require that all B. A. - Biology students must take 15 credit hours in a complementary field of study. We have listed a large number of complementary fields (see attached proposal). One of the complimentary fields of study is Food and Nutrition. As a consequence of this you may have additional Biology majors enrolling in your courses. I would greatly appreciate your comments on this proposal.

Sincerely yours,

Arthur C. Hulse,
 Chair, Curriculum Committee

Art Hulse

From: "Art Hulse" <ntcc@iup.edu>
To: "Susan Dahlheimer" <ssdahl@iup.edu>
Sent: Friday, January 24, 2003 10:22 AM
Subject: Re: BA in Biology program revision

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Best wishes,

Art Hulse

----- Original Message -----

From: [Susan Dahlheimer](#)
To: [Art Hulse](#)
Sent: Friday, January 24, 2003 10:06 AM
Subject: Re: BA in Biology program revision

Our department will be happy to accommodate any biology majors who would like to take our courses; their science background will be excellent preparation. We would particularly recommend this path to anyone interested in a medical/allied health career. I notice that you list this option as "dietetics", which really refers to our professional degrees. This should be changed to either "nutrition", which is the title of our minor or "food and nutrition", our department title. Let me know if we can be of any assistance.

----- Original Message -----

From: [Art Hulse](#)
To: [Dr. Susan Dahlheimer](#)
Sent: Thursday, January 23, 2003 10:23 AM
Subject: BA in Biology program revision

Dear Dr. Dahlheimer:

The Department of Biology is in the process of revising its Bachelor of Arts degree in Biology. Some of our revisions have the potential to impact your department. I wanted to inform you of these changes and solicit your comments relative to the changes. I have attached a copy of the Proposed Revision for you to examine.

The major change that might impact your department is that we are going to require that all B. A. – Biology students must take 15 credit hours in a complementary field of study. We have listed a large number of complementary fields (see attached proposal). One of the complimentary fields of study is Food and Nutrition. As a consequence of this you may have additional Biology majors enrolling in your courses. I would greatly appreciate your comments on this proposal.

Sincerely yours,

Arthur C. Hulse,
 Chair, Curriculum Committee

Art Hulse

From: "Art Hulse" <ntcc@iup.edu>
To: "Dr. Phil Neusius" <PHUN@iup.edu>
Sent: Thursday, January 23, 2003 10:29 AM
Attach: BA Program Revision.doc
Subject: BA in Biology program revision

Dear Dr. Neusius:

The Department of Biology is in the process of revising its Bachelor of Arts degree in Biology. Some of our revisions have the potential to impact your department. I wanted to inform you of these changes and solicit your comments relative to the changes. I have attached a copy of the Proposed Revision for you to examine.

The major change that might impact your department is that we are going to require that all B. A. – Biology students must take 15 credit hours in a complementary field of study. We have listed a large number of complementary fields (see attached proposal). One of the complimentary fields of study is Anthropology. As a consequence of this you may have additional Biology majors enrolling in your courses. I would greatly appreciate your comments on this proposal.

Sincerely yours,

Arthur C. Hulse,
Chair, Curriculum Committee

Art Hulse

From: "Phil Neusius" <phun@iup.edu>
To: "Art Hulse" <ntcc@iup.edu>
Cc: "Phillip D. Neusius" <phun@iup.edu>
Sent: Monday, January 27, 2003 11:11 AM
Subject: RE: BA in Biology program revision

Dear Dr. Hulse:

I want to thank you for sharing your planned revisions with us. We wholeheartedly support your notion of listing Anthropology as a complimentary field. We have had an increasing number of majors in both of our programs who have found the two fields to be valuable compliments. A notable example is last year's winner of the Syed R. Ali-Zaidi Award for academic excellence, Luke Matthews. Luke was a combined Biology and Anthropology major who is now pursuing graduate work in Biological Anthropology at New York University. We certainly look forward to increasing this type of cross-disciplinary opportunity.

Sincerely,

Phil Neusius, Chair
 Anthropology

-----Original Message-----

From: Art Hulse [mailto:ntcc@iup.edu]
Sent: Thursday, January 23, 2003 10:29 AM
To: Dr. Phil Neusius
Subject: BA in Biology program revision

Dear Dr. Neusius:

The Department of Biology is in the process of revising its Bachelor of Arts degree in Biology. Some of our revisions have the potential to impact your department. I wanted to inform you of these changes and solicit your comments relative to the changes. I have attached a copy of the Proposed Revision for you to examine.

The major change that might impact your department is that we are going to require that all B. A. – Biology students must take 15 credit hours in a complementary field of study. We have listed a large number of complementary fields (see attached proposal). One of the complimentary fields of study is Anthropology. As a consequence of this you may have additional Biology majors enrolling in your courses. I would greatly appreciate your comments on this proposal.

Sincerely yours,

Arthur C. Hulse,
 Chair, Curriculum Committee

Art Hulse

From: "Art Hulse" <ntcc@iup.edu>
To: "Dr. Gary Stoudt" <GSSTOUDT@iup.edu>
Sent: Thursday, January 23, 2003 11:16 AM
Attach: BA Program Revision.doc
Subject: BA in Biology program revision

Dear Dr. Stoudt:

The Department of Biology is in the process of revising its Bachelor of Arts degree in Biology. Some of our revisions have the potential to impact your department. I wanted to inform you of these changes and solicit your comments relative to the changes. I have attached a copy of the Proposed Revision for you to examine.

The changes that might impact your department are as follows:

- 1- we are going to require that all B. A. – Biology students must take 15 credit hours in a complementary field of study. We have listed a large number of complementary fields (see attached proposal). One of the complimentary fields of study is Mathematics.
- 2- Currently we require or majors to take MATH 121. In the new proposal we give them the option of selecting either MATH 121 or MATH 217.
- 3- We are broadening our controlled ancillary science courses that the students may select from. In our proposal the students have the following choices in Mathematics: MATH 121, 122,216,217, 417, 418

As a consequence of this you may have additional Biology majors enrolling in some of your courses and fewer in others depending upon which courses the students elect to take.

I would greatly appreciate your comments on this proposal. If you wish, I will be happy to discuss the proposal with you.

Sincerely yours,

Arthur C. Hulse,
Chair, Curriculum Committee

Art Hulse

From: "Gary Stoudt" <gsstoudt@iup.edu>
To: "Art Hulse" <ntcc@iup.edu>
Cc: "Gary Stoudt" <GSSTOUDT@iup.edu>
Sent: Monday, January 27, 2003 10:48 AM
Subject: Support for BA in Biology program revision

The Mathematics Department supports the proposed revisions to the Bachelor of Arts degree in Biology.

The rationale for changing the Liberal Studies Mathematics requirement from MATH 121 to MATH 121 or MATH 217 is a good one. The Mathematics Department can adjust to the slight decrease in enrollment in MATH 121 and the slight increase in MATH 217.

We support the proposed broadening of the controlled ancillary science courses to include mathematics courses and the addition of mathematics as a complementary field of study. The Mathematics Department can adjust to the potential increase in enrollments in MATH 121, 122, 216, 217, 417, 418 as well as the upper level courses that might be taken as a complementary field of study. It should be noted that students should not be allowed to take both MATH 216 and MATH 217, as there is significant overlap in the content of both courses.

Gary Stoudt
Mathematics

Art Hulse

From: "Art Hulse" <ntcc@iup.edu>
To: "Gary Stoudt" <gsstoudt@iup.edu>
Sent: Friday, January 24, 2003 7:59 AM
Subject: Re: BA in Biology Revision

Gary:

Thank you for the speedy reply. We can easily add MATH 121 to the list of ancillary courses and to avoid the potential of students trying to take both MATH 216 and 217 (which we don't want either) I think listing them in the ancillary courses as 216 or 217. So that the Math options would read MATH: 121, 122, 216 or 217, 417,418. If you would like it to be clearer than that we could insert a statement as a footnote that they may only take on or the other but not both. I would rather avoid the footnote option because too many footnotes begin to get confusing for the student. Please feel free to contact me about this or with any other questions that you might have.

Best wishes

Art

----- Original Message -----

From: "Gary Stoudt" <gsstoudt@iup.edu>
To: "Art Hulse" <ntcc@iup.edu>
Sent: Thursday, January 23, 2003 4:44 PM
Subject: BA in Biology Revision

> Art,
 >
 > Before I write the formal letter of support, I have a few
 > questions/comments.
 >
 > Under Ancillary Science Courses, MATH 217 is listed, presumably for
 > those who opt to take MATH 121 to satisfy the LS Math requirement.
 > Should MATH 121 be listed for those who choose MATH 217 for LS Math?
 > Also, MATH 216 is listed, which is fine, but a student who takes MATH
 > 217 should not be allowed to take MATH 216. There is significant
 > overlap between the two courses.
 >
 > It appears that if a student takes courses in an Ancillary Science, they
 > should do a different Complementary field, or else they would need 20
 > credits in that field. That is not bad or good, just a comment.
 >
 > Gary
 >
 > Gary Stoudt
 > Mathematics
 >
 >

Art Hulse

From: "Art Hulse" <ntcc@iup.edu>
To: "Dr. Gail Berlin" <IVY@iup.edu>
Sent: Thursday, January 23, 2003 10:37 AM
Attach: BA Program Revision.doc
Subject: BA in Biology program revision

Dear Dr. Berlin:

The Department of Biology is in the process of revising its Bachelor of Arts degree in Biology. Some of our revisions have the potential to impact your department. I wanted to inform you of these changes and solicit your comments relative to the changes. I have attached a copy of the Proposed Revision for you to examine.

The major change that might impact your department is that we are going to require that all B. A. – Biology students must take 15 credit hours in a complementary field of study. We have listed a large number of complementary fields (see attached proposal). One of the complimentary fields of study is English. As a consequence of this you may have additional Biology majors enrolling in your courses. I would greatly appreciate your comments on this proposal.

Sincerely yours,

Arthur C. Hulse,
Chair, Curriculum Committee

Art Hulse

From: "Gail Berlin" <IVY@iup.edu>
To: "Art Hulse" <ntcc@iup.edu>
Cc: "Gail Berlin" <ivy@iup.edu>; "Wendy Carse" <wcarse@grove.iup.edu>
Sent: Friday, January 24, 2003 1:53 PM
Subject: Fw: BA in Biology program revision

I stand corrected on one detail. Please see below.

Best,
 Gail

----- Original Message -----

From: Wendy K Carse <wcarse@iup.edu>
To: Gail Berlin <IVY@iup.edu>
Sent: Friday, January 24, 2003 12:55 PM
Subject: Re: BA in Biology program revision

> On Fri, 24 Jan 2003 12:43:18 -0500
 > actually neither 121 nor 122 counts toward the 15-hour minor (Since
 > both 121 and 122 count as LS req., the minor consists exclusively of
 > major courses).
 > "Gail Berlin" <IVY@iup.edu> wrote:
 >> Dear Dr. Hulse,
 >>
 >> Your complementary field requirement works well with our current
 >> program structure. We have a 15-credit English minor that students
 >> are welcome to take. If your majors are interested primarily in
 >> writing courses, they would not have to take ENGL 122 (Literary
 >> Analysis), the usual preparation for literature courses, but could
 >> use ENGL 121 (Humanities Literature) instead, which they will already
 >> have taken as a usual liberal studies requirement. We generally do
 >> count one of those two courses as a part of the 15 hours.
 >>
 >> Given the great number of complementary fields from which Biology
 >> majors could choose, I foresee no problem with the increased number of
 >> Biology majors in English classes.
 >>
 >> I am copying this note to Dr. Wendy Carse, our Director of BA
 >> English, who oversees the English Minor. We have already spoken
 >> about the complementary field requirement in Biology, and she concurs
 >> that it would pose no problem.
 >>
 >> Best,
 >> Gail Berlin, Chair
 >> Dept. of English
 >> ----- Original Message -----
 >> From: Art Hulse
 >> To: Gail Berlin
 >> Sent: Friday, January 24, 2003 10:28 AM
 >> Subject: Re: BA in Biology program revision
 >>
 >>
 >> Thanks Gail, feel free to call me or e-mail if you have any
 >> questions.
 >>
 >> Best wishes,
 >>
 >> Art
 >>
 >> ----- Original Message -----
 >> From: Gail Berlin
 >> To: Art Hulse
 >> Cc: Gail Berlin

1/24/03

>> Sent: Friday, January 24, 2003 10:29 AM
>> Subject: Re: BA in Biology program revision

>> Hello Art,

>> Just to let you know that I have received your program revision
>>and will review it shortly.

>> Best,
>> Gail

>> ----- Original Message -----

>> From: Art Hulse

>> To: Dr. Gail Berlin

>> Sent: Thursday, January 23, 2003 10:37 AM

>> Subject: BA in Biology program revision

>> Dear Dr. Berlin:

>> The Department of Biology is in the process of
>>revising its Bachelor of Arts degree in Biology. Some of our
>>revisions have the potential to impact your department. I wanted to
>>inform you of these changes and solicit your comments relative to the
>>changes. I have attached a copy of the Proposed Revision for you to
>>examine.

>> The major change that might impact your department
>>is that we are going to require that all B. A. - Biology students
>>must take 15 credit hours in a complementary field of study. We have
>>listed a large number of complementary fields (see attached
>>proposal). One of the complimentary fields of study is English. As
>>a consequence of this you may have additional Biology majors
>>enrolling in your courses. I would greatly appreciate your comments
>>on this proposal.

>> Sincerely yours,

>> Arthur C. Hulse,

>> Chair, Curriculum Committee

Art Hulse

From: "Art Hulse" <ntcc@iup.edu>
To: "Gail Berlin" <IVY@iup.edu>
Sent: Friday, January 24, 2003 10:28 AM
Subject: Re: BA in Biology program revision

Thanks Gail, feel free to call me or e-mail if you have any questions.

Best wishes,

Art

----- Original Message -----

From: [Gail Berlin](#)
To: [Art Hulse](#)
Cc: [Gail Berlin](#)
Sent: Friday, January 24, 2003 10:29 AM
Subject: Re: BA in Biology program revision

Hello Art,

Just to let you know that I have received your program revision and will review it shortly.

Best,
Gail

----- Original Message -----

From: [Art Hulse](#)
To: [Dr. Gail Berlin](#)
Sent: Thursday, January 23, 2003 10:37 AM
Subject: BA in Biology program revision

Dear Dr. Berlin:

The Department of Biology is in the process of revising its Bachelor of Arts degree in Biology. Some of our revisions have the potential to impact your department. I wanted to inform you of these changes and solicit your comments relative to the changes. I have attached a copy of the Proposed Revision for you to examine.

The major change that might impact your department is that we are going to require that all B. A. – Biology students must take 15 credit hours in a complementary field of study. We have listed a large number of complementary fields (see attached proposal). One of the complimentary fields of study is English. As a consequence of this you may have additional Biology majors enrolling in your courses. I would greatly appreciate your comments on this proposal.

Sincerely yours,

Arthur C. Hulse,
Chair, Curriculum Committee

Art Hulse

From: "Gail Berlin" <IVY@iup.edu>
To: "Art Hulse" <ntcc@iup.edu>
Cc: "Gail Berlin" <Ivy@iup.edu>; "Wendy K Carse" <wcarse@iup.edu>
Sent: Friday, January 24, 2003 12:43 PM
Subject: Re: BA in Biology program revision

Dear Dr. Hulse,

Your complementary field requirement works well with our current program structure. We have a 15-credit English minor that students are welcome to take. If your majors are interested primarily in writing courses, they would not have to take ENGL 122 (Literary Analysis), the usual preparation for literature courses, but could use ENGL 121 (Humanities Literature) instead, which they will already have taken as a usual liberal studies requirement. We generally do count one of those two courses as a part of the 15 hours.

Given the great number of complementary fields from which Biology majors could chose, I foresee no problem with the increased number of Biology majors in English classes.

I am copying this note to Dr. Wendy Carse, our Director of BA English, who oversees the English Minor. We have already spoken about the complementary field requirement in Biology, and she concurs that it would pose no problem.

Best,
 Gail Berlin, Chair
 Dept. of English

----- Original Message -----

From: [Art Hulse](#)
To: [Gail Berlin](#)
Sent: Friday, January 24, 2003 10:28 AM
Subject: Re: BA in Biology program revision

Thanks Gail, feel free to call me or e-mail if you have any questions.

Best wishes,

Art

----- Original Message -----

From: [Gail Berlin](#)
To: [Art Hulse](#)
Cc: [Gail Berlin](#)
Sent: Friday, January 24, 2003 10:29 AM
Subject: Re: BA in Biology program revision

Hello Art,

Just to let you know that I have received your program revision and will review it shortly.

Best,
 Gail

----- Original Message -----

From: [Art Hulse](#)
To: [Dr. Gail Berlin](#)
Sent: Thursday, January 23, 2003 10:37 AM
Subject: BA in Biology program revision

Dear Dr. Berlin:

The Department of Biology is in the process of revising its Bachelor of Arts degree in Biology. Some of our revisions have the potential to impact your department. I wanted to inform you of these changes and solicit your comments relative to the changes. I have attached a copy of the Proposed Revision for you to examine.

The major change that might impact your department is that we are going to require that all B. A. – Biology students must

take 15 credit hours in a complementary field of study. We have listed a large number of complementary fields (see attached proposal). One of the complimentary fields of study is English. As a consequence of this you may have additional Biology majors enrolling in your courses. I would greatly appreciate your comments on this proposal.

Sincerely yours,

Arthur C. Hulse,
Chair, Curriculum Committee

Art Hulse

From: "Art Hulse" <ntcc@iup.edu>
To: "Dr. Robert Camp" <BOBCAMP@iup.edu>
Sent: Thursday, January 23, 2003 12:44 PM
Attach: BA Program Revision.doc
Subject: BA in Biology program revision

Dear Dr. Camp

The Department of Biology is in the process of revising its Bachelor of Arts degree in Biology. Some of our revisions have the potential to impact your department. I wanted to inform you of these changes and solicit your comments relative to the changes. I have attached a copy of the Proposed Revision for you to examine.

The major change that might impact your department is that we are going to require that all B. A. – Biology students must take 15 credit hours in a complementary field of study. We have listed a large number of complementary fields (see attached proposal). One of the complimentary fields of study is Business. As a consequence of this you may have additional Biology majors enrolling in your courses. I would greatly appreciate your comments on this proposal.

Art Hulse

From: "Robert Camp" <bobcamp@iup.edu>
To: "Art Hulse" <ntcc@iup.edu>
Cc: "Department Chairs" <Ecob-ch@grove.iup.edu>
Sent: Friday, February 07, 2003 10:27 AM
Subject: Re: BA in Biology program revision

The Chairpersons in the Eberly College had an opportunity this week to review your proposed revision of requirements for the Bachelor of Arts degree in Biology. They appreciated the fact that you are proposing 15 credit hours in a complimentary field. They do not believe that students should be allowed to pick and choose the coursework. They believe there should be collaboration between them and Biology for the purpose of selecting appropriate coursework. If you would like for them to set forth their opinions regarding the most suitable block of coursework, please let me know.

Bob Camp

----- Original Message -----

From: [Art Hulse](#)
To: [Dr. Robert Camp](#)
Sent: Thursday, January 23, 2003 12:44 PM
Subject: BA in Biology program revision

Dear Dr. Camp

The Department of Biology is in the process of revising its Bachelor of Arts degree in Biology. Some of our revisions have the potential to impact your department. I wanted to inform you of these changes and solicit your comments relative to the changes. I have attached a copy of the Proposed Revision for you to examine.

The major change that might impact your department is that we are going to require that all B. A. – Biology students must take 15 credit hours in a complementary field of study. We have listed a large number of complementary fields (see attached proposal). One of the complimentary fields of study is Business. As a consequence of this you may have additional Biology majors enrolling in your courses. I would greatly appreciate your comments on this proposal.

Art Hulse

From: "Art Hulse" <ntcc@iup.edu>
To: "Robert Camp" <bobcamp@iup.edu>
Sent: Friday, February 07, 2003 11:05 AM
Subject: Re: BA in Biology program revision

Dear Dr. Camp:

Thank you very much for the input of you and your chairs regarding the B.A. in Biology revision. We would greatly appreciate input from the College of Business as to the most appropriate courses that our students should take. I have already received input of this nature from some other departments and am compiling a document regarding the most appropriate courses for students to take with regard to specific complimentary fields. This, when complete, will be distributed to all of our faculty for use in advising B.A. students.

Best wishes,

Art Hulse

----- Original Message -----

From: [Robert Camp](#)
To: [Art Hulse](#)
Cc: [Department Chairs](#)
Sent: Friday, February 07, 2003 10:27 AM
Subject: Re: BA in Biology program revision

The Chairpersons in the Eberly College had an opportunity this week to review your proposed revision of requirements for the Bachelor of Arts degree in Biology. They appreciated the fact that you are proposing 15 credit hours in a complimentary field. They do not believe that students should be allowed to pick and choose the coursework. They believe there should be collaboration between them and Biology for the purpose of selecting appropriate coursework. If you would like for them to set forth their opinions regarding the most suitable block of coursework, please let me know.

Bob Camp

----- Original Message -----

From: [Art Hulse](#)
To: [Dr. Robert Camp](#)
Sent: Thursday, January 23, 2003 12:44 PM
Subject: BA in Biology program revision

Dear Dr. Camp

The Department of Biology is in the process of revising its Bachelor of Arts degree in Biology. Some of our revisions have the potential to impact your department. I wanted to inform you of these changes and solicit your comments relative to the changes. I have attached a copy of the Proposed Revision for you to examine.

The major change that might impact your department is that we are going to require that all B. A. – Biology students must take 15 credit hours in a complementary field of study. We have listed a large number of complementary fields (see attached proposal). One of the complimentary fields of study is Business. As a consequence of this you may have additional Biology majors enrolling in your courses. I would greatly appreciate your comments on this proposal.

Art Hulse

From: "Art Hulse" <ntcc@iup.edu>
To: "Dr. Darlene Richardson" <DRCHRDSN@iup.edu>
Sent: Thursday, January 23, 2003 11:00 AM
Attach: BA Program Revision.doc
Subject: BA in Biology program revision

Dear Darlene:

The Department of Biology is in the process of revising its Bachelor of Arts degree in Biology. Some of our revisions have the potential to impact your department. I wanted to inform you of these changes and solicit your comments relative to the changes. I have attached a copy of the Proposed Revision for you to examine.

The major change that might impact your department is that we are going to require that all B. A. – Biology students must take 15 credit hours in a complementary field of study. We have listed a large number of complementary fields (see attached proposal). One of the complimentary fields of study is Geology/Geoscience. As a consequence of this you may have additional Biology majors enrolling in your courses

In addition to this we have expanded our range of ancillary science options for our majors. Among other things they may now select from a number of Geoscience Courses including GEOS 121 and 121, 131 and 132, 141,310,330, 331 and 361.

I would greatly appreciate your comments on this proposal. If you wish, I will be happy to discuss the proposal with you.

Sincerely yours,

Arthur C. Hulse,
Chair, Curriculum Committee

Art Hulse

From: "Darlene Richardson" <drchrdsn@iup.edu>
To: "Art Hulse" <ntcc@iup.edu>
Cc: "Darlene Richardson" <Drchrdsn@iup.edu>
Sent: Thursday, January 23, 2003 3:00 PM
Subject: Re: BA in Biology program revision

Hi, Art.

Thanks for the preview of your revisions in BA Biology. Geoscience does have room in most of its courses for Biology majors. Your students are welcome in our 100 and 300 level courses, of course. I remind you that most of our 300 level courses have prerequisites. Your majors most likely would have the Math (MATH 121-122 or 123-124) and Physics (PHYS 111) prerequisites for GEOS 331 (Hydrogeology) and GEOS 361 (Physical Oceanography). Prerequisites for GEOS 310 (Environmental Geoscience) and GEOS 331 (Paleontology) are GEOS 121-122 (Physical Geology lecture and lab) and 131-132 (Historical Geology lecture and lab).

Students who choose a complementary field in geology/geoscience are also welcome.

Good luck on the curriculum process. Darlene

----- Original Message -----

From: [Art Hulse](#)
To: [Dr. Darlene Richardson](#)
Sent: Thursday, January 23, 2003 11:00 AM
Subject: BA in Biology program revision

Dear Darlene:

The Department of Biology is in the process of revising its Bachelor of Arts degree in Biology. Some of our revisions have the potential to impact your department. I wanted to inform you of these changes and solicit your comments relative to the changes. I have attached a copy of the Proposed Revision for you to examine.

The major change that might impact your department is that we are going to require that all B. A. – Biology students must take 15 credit hours in a complementary field of study. We have listed a large number of complementary fields (see attached proposal). One of the complimentary fields of study is Geology/Geoscience. As a consequence of this you may have additional Biology majors enrolling in your courses

In addition to this we have expanded our range of ancillary science options for our majors. Among other things they may now select from a number of Geoscience Courses including GEOS 121 and 121, 131 and 132, 141,310,330, 331 and 361.

I would greatly appreciate your comments on this proposal. If you wish, I will be happy to discuss the proposal with you.

Sincerely yours,

Arthur C. Hulse,
 Chair, Curriculum Committee

Art Hulse

From: "Art Hulse" <ntcc@iup.edu>
To: "Darlene Richardson" <drchrdsn@iup.edu>
Sent: Friday, January 24, 2003 9:56 AM
Subject: Re: BA in Biology program revision

Good Morning Darlene:

Thanks so much for your rapid response to my e-mail. Within a few days I will be sending you another one of a similar nature concerning our revised B.S. program. We understand that many of the higher level courses on our list of ancillary sciences have prerequisites. We opted not to mention it in the document per se so as to not clutter up the document with an excessive amount of footnotes. In our advising sheet that we give to students and to advisors we will stress that courses might have prerequisites and what those courses are as well as the prerequisites.

See you this PM at the curriculum meeting.

Best wishes,

Art

----- Original Message -----

From: [Darlene Richardson](#)
To: [Art Hulse](#)
Cc: [Darlene Richardson](#)
Sent: Thursday, January 23, 2003 3:00 PM
Subject: Re: BA in Biology program revision

Hi, Art.

Thanks for the preview of your revisions in BA Biology. Geoscience does have room in most of its courses for Biology majors. Your students are welcome in our 100 and 300 level courses, of course. I remind you that most of our 300 level courses have prerequisites. Your majors most likely would have the Math (MATH 121-122 or 123-124) and Physics (PHYS 111) prerequisites for GEOS 331 (Hydrogeology) and GEOS 361 (Physical Oceanography). Prerequisites for GEOS 310 (Environmental Geoscience) and GEOS 331 (Paleontology) are GEOS 121-122 (Physical Geology lecture and lab) and 131-132 (Historical Geology lecture and lab).

Students who choose a complementary field in geology/geoscience are also welcome.

Good luck on the curriculum process. Darlene

----- Original Message -----

From: [Art Hulse](#)
To: [Dr. Darlene Richardson](#)
Sent: Thursday, January 23, 2003 11:00 AM
Subject: BA in Biology program revision

Dear Darlene:

The Department of Biology is in the process of revising its Bachelor of Arts degree in Biology. Some of our revisions have the potential to impact your department. I wanted to inform you of these changes and solicit your comments relative to the changes. I have attached a copy of the Proposed Revision for you to examine.

The major change that might impact your department is that we are going to require that all B. A. – Biology students must take 15 credit hours in a complementary field of study. We have listed a large number of complementary fields (see attached proposal). One of the complimentary fields of study is Geology/Geoscience. As a consequence of this you may have additional Biology majors enrolling in your courses

In addition to this we have expanded our range of ancillary science options for our majors. Among other things they may now select from a number of Geoscience Courses including GEOS 121 and 121, 131 and 132, 141,310,330, 331 and 361.

I would greatly appreciate your comments on this proposal. If you wish, I will be happy to discuss the proposal with you.

Sincerely yours,

Arthur C. Hulse,
 Chair, Curriculum Committee

Art Hulse

From: "Art Hulse" <ntcc@iup.edu>
To: "Dr. Dennis Giever" <DGIEVER@iup.edu>
Sent: Thursday, January 23, 2003 10:31 AM
Attach: BA Program Revision.doc
Subject: BA in Biology program revision

Dear Dr. Giever:

The Department of Biology is in the process of revising its Bachelor of Arts degree in Biology. Some of our revisions have the potential to impact your department. I wanted to inform you of these changes and solicit your comments relative to the changes. I have attached a copy of the Proposed Revision for you to examine.

The major change that might impact your department is that we are going to require that all B. A. – Biology students must take 15 credit hours in a complementary field of study. We have listed a large number of complementary fields (see attached proposal). One of the complimentary fields of study is Criminology. As a consequence of this you may have additional Biology majors enrolling in your courses. I would greatly appreciate your comments on this proposal.

Sincerely yours,

Arthur C. Hulse,
Chair, Curriculum Committee

No reply as of March 17, 2003

Art Hulse

From: "Art Hulse" <ntcc@iup.edu>
To: "Dr. Mary Lou Zanich" <MLZANICH@iup.edu>
Sent: Thursday, January 23, 2003 11:25 AM
Attach: BA Program Revision.doc
Subject: BA in Biology program revision

Dear Dr. Zanich:

The Department of Biology is in the process of revising its Bachelor of Arts degree in Biology. Some of our revisions have the potential to impact your department. I wanted to inform you of these changes and solicit your comments relative to the changes. I have attached a copy of the Proposed Revision for you to examine.

The change that might impact your department is that we are going to require that all B. A. – Biology students must take 15 credit hours in a complementary field of study. We have listed a large number of complementary fields (see attached proposal). One of the complimentary fields of study is Psychology.

As a consequence of this you may have additional Biology majors enrolling in Psychology courses depending upon what they opt for with regard to a complementary field of study.

I would greatly appreciate your comments on this proposal

Sincerely yours,

Arthur C. Hulse,
Chair, Curriculum Committee

No reply as of March 14, 2003

Art Hulse

From: "Art Hulse" <ntcc@iup.edu>
To: "Dr. Ken Hershman" <HERSHMAN@iup.edu>
Sent: Thursday, January 23, 2003 11:21 AM
Attach: BA Program Revision.doc
Subject: BA in Biology program revision

Dear Ken:

The Department of Biology is in the process of revising its Bachelor of Arts degree in Biology. Some of our revisions have the potential to impact your department. I wanted to inform you of these changes and solicit your comments relative to the changes. I have attached a copy of the Proposed Revision for you to examine.

The changes that might impact your department are as follows:

- 1- We are going to require that all B.A. in Biology students take PHYS 111 and 121.
 - 2- we are going to require that all B. A. – Biology students must take 15 credit hours in a complementary field of study. We have listed a large number of complementary fields (see attached proposal). One of the complimentary fields of study is Physics.
 - 3- We are broadening our controlled ancillary science courses that the students may select from. In our proposal the students have the following choices in Physics: PHYS 112,122,151
- As a consequence of this you will have additional Biology majors enrolling in PHYS 111 and 121 and may have additional students enrolling in other physics courses depending upon what they opt for with regard to a complementary field and in ancillary sciences.

I would greatly appreciate your comments on this proposal. If you wish, I will be happy to discuss the proposal with you.

Sincerely yours,

Arthur C. Hulse,
Chair, Curriculum Committee

No reply as of March 14, 2003

Art Hulse

From: "Art Hulse" <ntcc@iup.edu>
To: "Dr. Ruiess Ramsey" <RVBRAVO@iup.edu>
Sent: Thursday, January 23, 2003 10:55 AM
Attach: BA Program Revision.doc
Subject: BA in Biology program revision

Dear Ruiess:

The Department of Biology is in the process of revising its Bachelor of Arts degree in Biology. Some of our revisions have the potential to impact your department. I wanted to inform you of these changes and solicit your comments relative to the changes. I have attached a copy of the Proposed Revision for you to examine.

There are changes in the revision that might have impact on your department. These are as follows:

- 1- We are going to require that all B. A. – Biology students must take 15 credit hours in a complementary field of study. We have listed a large number of complementary fields (see attached proposal). One of the complimentary fields of study is Chemistry. As a consequence of this you may have additional Biology majors enrolling in your courses.
- 2- We are no longer going to require all of our BA in Biology majors to take CHEM 231 and CHEM 351. Instead our students will have the option of taking ancillary sciences courses from a variety of different fields (see attachment) including chemistry. The chemistry courses that the students may select from (if they so opt) are CHEM 231,232,321,323,and 351. This change in our program to allow students to select from a wide variety of ancillary science courses reflects the extreme diversity of the biological sciences and the fact that with such diversity a fixed set of ancillary science courses does not best serve all of our students. Depending upon their interests chemistry might be the most important ancillary science , however for other students it might be Geoscience or Physics etc. I would greatly appreciate your comments on this proposal and would also be happy to discuss it with you if you so desire.

Sincerely yours,

Arthur C. Hulse,
Chair, Curriculum Committee

No reply as of March 14, 2003

Art Hulse

From: "Art Hulse" <ntcc@iup.edu>
To: "Dr. Robert Russell" <RHRUSSEL@iup.edu>
Sent: Thursday, January 23, 2003 10:43 AM
Attach: BA Program Revision.doc
Subject: BA in Biology program revision

Dear Dr. Russell:

The Department of Biology is in the process of revising its Bachelor of Arts degree in Biology. Some of our revisions have the potential to impact your department. I wanted to inform you of these changes and solicit your comments relative to the changes. I have attached a copy of the Proposed Revision for you to examine.

The major change that might impact your department is that we are going to require that all B. A. – Biology students must take 15 credit hours in a complementary field of study. We have listed a large number of complementary fields (see attached proposal). One of the complimentary fields of study is Journalism. As a consequence of this you may have additional Biology majors enrolling in your courses. I would greatly appreciate your comments on this proposal.

Sincerely yours,

Arthur C. Hulse,
Chair, Curriculum Committee

No reply as of March 14, 2003

Art Hulse

From: "Art Hulse" <ntcc@iup.edu>
To: "Dr. Vaughn Clay" <VONCLAY@iup.edu>
Sent: Thursday, January 23, 2003 10:19 AM
Attach: BA Program Revision.doc
Subject: BA Biology program revision

Dear Dr. Clay:

The Department of Biology is in the process of revising its Bachelor of Arts degree in Biology. Some of our revisions have the potential to impact your department. I wanted to inform you of these changes and solicit your comments relative to the changes. I have attached a copy of the Proposed Revision for you to examine.

The major change that might impact your department is that we are going to require that all B. A. – Biology students must take 15 credit hours in a complementary field of study. We have listed a large number of complementary fields (see attached proposal). One of the complimentary fields of study is Art. As a consequence of this you may have additional Biology majors enrolling in your courses. I would greatly appreciate your comments on this proposal.

Sincerely yours,

Arthur C. Hulse,
Chair, Curriculum Committee

No reply as of March 14, 2003

Art Hulse

From: "Art Hulse" <ntcc@iup.edu>
To: "Dr. Nicholas Karatjas" <KARATJAS@iup.edu>
Sent: Thursday, January 23, 2003 10:35 AM
Attach: BA Program Revision.doc
Subject: BA in Biology program revision

Dear Dr. Karatjas:

The Department of Biology is in the process of revising its Bachelor of Arts degree in Biology. Some of our revisions have the potential to impact your department. I wanted to inform you of these changes and solicit your comments relative to the changes. I have attached a copy of the Proposed Revision for you to examine.

The major change that might impact your department is that we are going to require that all B. A. – Biology students must take 15 credit hours in a complementary field of study. We have listed a large number of complementary fields (see attached proposal). One of the complimentary fields of study is Economics. As a consequence of this you may have additional Biology majors enrolling in your courses. I would greatly appreciate your comments on this proposal.

Sincerely yours,

Arthur C. Hulse,
Chair, Curriculum Committee

No reply as of March 14, 2003

Art Hulse

From: "Art Hulse" <ntcc@iup.edu>
To: "Dr. Charles McCreary" <CHASMC@iup.edu>
Sent: Thursday, January 23, 2003 10:38 AM
Attach: BA Program Revision.doc
Subject: BA in Biology program revision

Dear Dr. McCreary:

The Department of Biology is in the process of revising its Bachelor of Arts degree in Biology. Some of our revisions have the potential to impact your department. I wanted to inform you of these changes and solicit your comments relative to the changes. I have attached a copy of the Proposed Revision for you to examine.

The major change that might impact your department is that we are going to require that all B. A. – Biology students must take 15 credit hours in a complementary field of study. We have listed a large number of complementary fields (see attached proposal). One of the complimentary fields of study is Foreign Languages. As a consequence of this you may have additional Biology majors enrolling in your courses. I would greatly appreciate your comments on this proposal.

Sincerely yours,

Arthur C. Hulse,
Chair, Curriculum Committee

*No reply as of
March 14, 2003*