UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

Office of the Provost and Vice Chancellor
for Academic Affairs

Swanlund Administration Building
601 East John Street
Champaign, IL 61820

August 16, 2010

Abbas Aminmansour, Chair
Senate Committee on Educational Policy
Office of the Senate
228 English Building, MC-461

Dear Professor Aminmansour:

Enclosed is a copy of a proposal from the College of Liberal Arts and Sciences to establish two undergraduate minors. The proposed minors are Integrative Biology and Ecology and Conservation Biology.

This proposal has been approved by the Committee on Course and Curricula, Dean's Cabinet, Executive Committee, and the Faculty of the College of Liberal Arts and Sciences. It now requires Senate review.

Sincerely,

Kristi A. Kuntz
Assistant Provost

KAK/dkk

Enclosures

c: C. Augspurper
E. DeLucia
A. Mester
R. Watkins

telephone (217) 333-6677 • *fax* (217) 244-5639
url www.provost.illinois.edu

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

Office of the Dean

College of Liberal Arts and Sciences
294 Lincoln Hall
702 South Wright Street
Urbana, IL 61801-3631

April 15, 2010

Kritsi Kuntz
Assistant Provost
Swanlund Administration Building
MC-304

Dear Kristi:

The Committee on Courses and Curricula, Dean's Cabinet, and Executive Committee on behalf of the Faculty of the College of Liberal Arts and Sciences has voted to approve the following proposal:

ESTABLISH TWO UNDERGRADUATE MINORS IN THE SCHOOL OF INTEGRATIVE BIOLOGY, LAS

Title of Proposed Minors:

1) Integrative Biology
2) Ecology and Conservation Biology

Please address all correspondence concerning this proposal to me. This proposal is now ready for review by the Senate Educational Policy Committee for proposed implementation Spring 2011.

Sincerely,

Ann M. Mester
Associate Dean

enclosure
C: Professor Carol Augspurger
Professor Evan DeLucia

PROPOSAL TO THE SENATE COMMITTEE ON EDUCATIONAL POLICY TO ESTABLISH AN UNDERGRADUATE MINOR

PROPOSAL TO ESTABLISH TWO UNDERGRADUATE MINORS IN THE SCHOOL OF INTEGRATIVE BIOLOGY, LAS

Title of Proposed Minors:

1) Integrative Biology
2) Ecology and Conservation Biology

Sponsoring Unit:

School of Integrative Biology, LAS
Dr. Carol Augspurger, Associate Director for Academic Affairs,
333-1298, carolaug@life.illinois.edu

Brief Description of the Program of Study:

Two minors in the School of Integrative Biology are proposed: Integrative Biology and Ecology and Conservation Biology. Each minor requires some depth in biology, but not as extensive as the major. The IB major completes four core IB courses at the 200-300 level and then at least four additional IB courses at a more advanced level. Each of the IB minors requires completion of two of these 200-300 level core courses plus two additional advanced courses. Each minor can be completed with 17 or 18 hours, although they may expand to as high as 24 hours, depending on how many lab courses the student elects (see below).

Justification:

Integrative Biology is the study of interactions among the different components of life, from molecules through global cycles. These minors were chosen because they emphasize the diversity of strengths within our faculty, departments, and curriculum. Biology is complex and has many sub-disciplines. Rather than having only one minor in biology, we propose two separate minors, each of which will provide specific training that will enhance a student's specific career or educational goals.

First, a Minor in Integrative Biology is ideal for students intending to have a career in a field other than biology, but for whom a background in biology is nevertheless complementary, e.g. law, technology, bioinformatics, business, scientific writing, and engineering. A Minor in Integrative Biology provides an understanding of fundamental principles for one major sub-discipline of biology, whether this be organismal and evolutionary biology; behavior, ecology and the environment; or integrative anatomy, physiology, and molecular biology.

Second, students interested in Ecology and Conservation should take a prescribed set of courses pointing them toward getting strength in this sub-discipline of biology. Preparation for many careers is advanced by coursework in ecology and conservation, e.g. environmental lawyer, environmental consultant, conservation technician, and environmental educator.

Budgetary and Staff Implications:

a. Additional staff and dollars needed

No new staff will be needed. Minor expenses will be added to lab courses that have a greater number of students per section if more supplies/materials are needed.

b. Internal reallocations

None is required for courses that are lecture only. Students will be divided among many courses, thus not greatly expanding the number in any one lecture course. For courses with discussion and lab sections, we will not add any new sections or TAs. Rather, we will accommodate these new students into existing sections by careful management to reach maximum capacity. Lab sections sometimes are not at maximum capacity and can accommodate 2-3 more students. If necessary, we will expand some discussion and/or lab sections by two students beyond their current number of 20 per section. In our large courses with 8-9 sections, addition of two spaces to that many sections will accommodate most of the expected extra student load.

c. Effect on course enrollment in other departments

None foreseen.

d. Impact on library, computer use, laboratory use, equipment, etc.

None foreseen. Lab sections often work in groups of 2-4. Adding 1-2 students to a section does not change required equipment or lab materials. Group size is simply changed.

Requirements:

Minor in Integrative Biology

Hours	Course Requirements
4	IB 150 – Organismal and Evolutionary Biology (4 hours) or IB 103 – Introduction to Plant Biology (4 hours) or IB 104 – Animal Biology (4 hours)
7-8	Two of the following: IB 202 – Structure and Function (4 hours) IB 203 – Ecology (4 hours) IB 204 – Genetics (3 hours, lecture only; 4 hours, with lab) IB 302 – Evolution (4 hours)
6-8	Two additional courses at the 300 or 400 level (3-4 hours, some 5 hours) These courses to be selected from SIB Area Courses or Approved List of Additional Courses for the IB Major. The prerequisite course(s) must be taken if specified by an advanced course.
17-20 hours	

Other possible combinations of courses are possible for the Minor in Integrative Biology, provided that the combination is approved by an advisor.

Minor in Ecology and Conservation Biology

Hours	Course Requirements
4	IB 150 – Organismal and Evolutionary Biology (4 hours)
4	IB 203 – Ecology (4 hours)
4	IB 204 – Genetics (4 hours)
6-8	Two additional courses from the following courses: NRES 348 – Fish and Wildlife Ecology (3 hours) IB 431 – Behavioral Ecology (3 hours) CPSC 431 – Plants and Global Change (3 hours) IB 443 – Evolutionary Ecology (3 hours) IB 444 – Insect Ecology (3 or 4 hours) IB 449 – Limnology (4 hours) IB 451 – Conservation Biology (4 hours) IB 452 – Ecosystem Ecology (3 hours) IB 453 – Community Ecology (3 hours)
18-20 hours	

Prerequisites for the minor:

No prerequisites are required for either of the two minors.

Expected enrollment in the minor:

Integrative Biology: 25
Ecology and Conservation Biology: 25

Admission to the minor:

Admission into each of the minors will be through the approval of an Integrative Biology Academic Advisor. We do not expect to have to limit enrollment in either of the minors.

Minor advisor:

The Integrative Biology Academic Advisor is responsible for advising, on a semester-by-semester basis, the academic course enrollment of all students in the minor. Any course changes made during the semester are subject to approval by the Advisor.

Certification of successful completion:

Academic Advisors will assist students with course selections so that all graduation requirements are met. Initially, an IB advisor will meet with LAS staff to set up requirements in DARwin and then subsequently LAS, the advisor and student can monitor progress and successful completion.

CLEARANCES

[signature] 17 December 2009

Head/chair of the sponsoring department or unit

[signature] 4/15/10

Dean of the college of the sponsoring department or unit

Chair, Senate Educational Policy Committee

Proposed Effective Date: Spring 2011

Statement for Program of Study Catalog

Minor in Integrative Biology

The minor, administered by the School of Integrative Biology, is designed for students intending to have a career in a field other than biology, but for whom a background in biology is nevertheless complementary, e.g. law, technology, bioinformatics, business, scientific writing, and engineering. A minor in integrative biology provides an understanding of fundamental principles for one major subdiscipline of biology, whether this be organismal and evolutionary biology; behavior, ecology and the environment; or integrative anatomy, physiology, and molecular biology.

Students must contact an SIB advisor for acceptance into the minor.

Hours	Course Requirements
4	One of the following: IB 150 – Organismal and Evolutionary Biology or IB 103 – Introduction to Plant Biology or IB 104 – Animal Biology
7-8	Two of the following: IB 202 – Structure and Function (4 hours) IB 203 – Ecology (4 hours) IB 204 – Genetics (3 hours, lecture only; 4 hours, with lab) IB 302 – Evolution (4 hours)
6-8	Two additional courses at the 300 or 400 level (3-4 hours, some 5 hours) These courses to be selected from SIB Area Courses or Approved List of Additional Courses for the IB Major. The prerequisite course(s) must be taken if specified by an advanced course.
17-20	Total hours

Other possible combinations of courses are possible for the Integrative Biology minor, if an SIB advisor approves the combination.

Statement for Program of Study Catalog

Ecology and Conservation Biology Minor

The minor, administered by the School of Integrative Biology, is designed for students interested in gaining strength in this subdiscipline of biology. Preparation for many careers is advanced by coursework in ecology and conservation, e.g. environmental lawyer, environmental consultant, conservation technician, environmental educator, and environmental engineer.

Students must contact an SIB advisor for acceptance into the minor.

Hours	Course Requirements
4	IB 150 – Organismal and Evolutionary Biology
4	IB 203 – Ecology
4	IB 204 – Genetics
6-8	Two additional courses from the following courses: NRES 348 – Fish and Wildlife Ecology (3 hours; same as IB 348) IB 431 – Behavioral Ecology (3 hours) CPSC 431– Plants and Global Change (3 hours; same as IB 440) IB 443 – Evolutionary Ecology (3 hours) IB 444 – Insect Ecology (3 or 4 hours) IB 449 – Limnology (4 hours) IB 451 – Conservation Biology (4 hours) IB 452 – Ecosystem Ecology (3 hours) IB 453 – Community Ecology (3 hours)
18-20	Total Hours

Elli, Amy Lawrence

From: Mester, Ann Marie
Sent: Thursday, April 08, 2010 10:55 AM
To: Elli, Amy Lawrence
Subject: FW: IB minors

Ann M Mester
Associate Dean, College of LAS
Adjunct Assistant Professor of Anthropology
University of Illinois
Phone (217) 333-1350; Fax (217) 333-9142
mester@illinois.edu

Due to the Lincoln Hall renovation, I've relocated to:
156 Computer Applications Building
605 E. Springfield Avenue, Champaign

The mailing address will remain:
294 Lincoln Hall
702 S. Wright Street
Urbana, Il 61801
MC-448

From: Melissa Michael [mailto:mmichae@life.uiuc.edu]
Sent: Thursday, April 08, 2010 10:45 AM
To: Mester, Ann Marie
Cc: Sligar, Stephen G
Subject: Fwd: IB minors

Dear Ann,
I'm responding on behalf of Dr. Sligar and the School of MCB. We find no serious content or programmatic overlap in either of the minors proposed by Integrative Biology. We do, however, object to the use of the name "Biology Minor" because it could lead to confusion on the part of students who are not clear about the differences between the Schools of IB and MCB. The MCB Minor is specific to our UG degree program name and we would greatly prefer to see the name changed to "Integrative Biology Minor" such that both of these minors are clearly related to their degree-granting entity. The only other degree programs that retain the use of "Biology" are the non-degree granting Biological Sciences Program in to which our freshmen come and the MS Biology degree which is still a shared program between the Schools. Thank you for the opportunity to comment on this proposal prior to it moving forward.
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From: "Mester, Ann Marie" <mester@illinois.edu>
Date: April 7, 2010 2:32:18 PM CDT
To: "Sligar, Stephen G" <s-sligar@illinois.edu>, "Michael, Melissa" <mmichae@illinois.edu>, "Clayton, David F" <dclayton@illinois.edu>, "Marshak, Stephen" <smarshak@illinois.edu>
Cc: "Elli, Amy Lawrence" <amyelli@illinois.edu>
Subject: FW: IB minors

Mester, Ann Marie

From: Jonathan Tomkin [tomkin@illinois.edu]
Sent: Wednesday, April 07, 2010 3:26 PM
To: Mester, Ann Marie
Cc: Marshak, Stephen
Subject: Re: Fwd: IB minors

Hi Ann,
SESE has no problem with these minors: there is no programmatic overlap.
Best,
Jonathan

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Begin forwarded message:

From: "Mester, Ann Marie" <mester@illinois.edu>
Date: April 7, 2010 2:32:18 PM CDT
To: "Sligar, Stephen G" <s-sligar@illinois.edu>, "Michael, Melissa" <mmichae@illinois.edu>, "Clayton, David F" <dclayton@illinois.edu>, "Marshak, Stephen" <smarshak@illinois.edu>
Cc: "Elli, Amy Lawrence" <amyelli@illinois.edu>
Subject: FW: IB minors

Good afternoon:

The LAS Executive Committee has approved TWO undergraduate minors offered by the School of Integrative Biology, but wanted to have you consider issues of programmatic overlap with your own programs before we forward them to the campus for Senate review. Please direct your responses to me.

Ann M Mester
Associate Dean, College of LAS
Adjunct Assistant Professor of Anthropology
University of Illinois
Phone (217) 333-1350; Fax (217) 333-9142
mester@illinois.edu

Due to the Lincoln Hall renovation, I've relocated to:
156 Computer Applications Building
605 E. Springfield Avenue, Champaign

The mailing address will remain:
294 Lincoln Hall
702 S. Wright Street
Urbana, Il 61801
MC-448

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UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

Department of Natural Resources
and Environmental Sciences
College of Agricultural, Consumer
and Environmental Sciences
W-503 Turner Hall
1102 South Goodwin Avenue
Urbana, IL 61801

January 12, 2010

Dr. Ann M. Mester
Associate Dean, College of LAS
University of Illinois

Dear Ann:

As Head of the Department of Natural Resources and Environmental Sciences, College of ACES, I am writing this letter in support of the proposed minor in "Ecology and Conservation Biology" being submitted by the School of Integrative Biology.

NRES's Courses and Curriculum Committee has studied the proposed minor and, while there is some similarity to our undergraduate programs, we feel that programmatic overlap is not an issue. The emphasis of the proposed minor is general ecology and evolutionary biology with applied aspects and is different from, and complimentary to, our undergraduate programs that focus on the ecology and management and of natural resources and environmental sciences.

We appreciate the opportunity for review the proposed minor and hope the approval process runs quickly and smoothly for SIB. Please do not hesitate to contact me with questions or concerns.

Sincerely,

Dr. Jeffrey D. Brawn
Professor and Head, Department of Natural
Resources and Environmental Sciences
University of Illinois at Urbana-Champaign
jbrawn@illinois.edu
217-244-5937

SIB AREA COURSES

The list below shows the SIB courses that fulfill area requirements in the IB major and the area(s) into which they fall. Click here to see the list of IB Advising Options and links to courses suggested for each.

Course No.	Course Title	Credit (hours)	Offered
Area I: Organismal & Evolutionary Biology			
IB 335	Systematics of Plants*	4	spring
IB 368	Vertebrate Natural History*	4	fall
IB 401	Introduction to Entomology*	3 or 4	fall (some summers)
IB 406	Evolution of Adaptive Systems	3	fall
IB 409	Evolution of Infectious Disease	3	spring
IB 410	Evolution and Development	3	spring, odd years
IB 433	Comparative Anatomy* (involves vertebrate dissection in some labs)	5	spring
IB 461	Ornithology*	4	spring
IB 462	Mammalogy* (involves vertebrate dissection in some labs)	4	fall, odd years
IB 463	Ichthyology*	4	fall, even years
IB 464	Herpetology*	4	spring, even years
IB 466	Invertebrate Zoology*	4	spring, odd years
IB 469	Evolutionary Survey of Plants*	4	fall (not offered fall 2009)
IB 470	Field Botany*	5	summer, even years
IB 471	General Mycology*	4	fall, even years
MCB 300	Microbiology	3	fall, spring, summer
Area II: Behavior, Ecology, & the Environment			
IB 405	Ecological Genetics	3	fall, even years (not offered fall 2010)
IB 429	Animal Behavior	3	spring 2010
IB 431	Behavioral Ecology	3	fall, odd years
IB 432	Genes and Behavior	3	spring
IB 439	Biogeography	3	spring, even years
IB 440 controlled by CPSC 431	Plants and Global Change	3	spring
IB 443	Evolutionary Ecology	3	fall, odd years
IB 444	Insect Ecology**	3 or 4	fall, even years
IB 445	Chemical Ecology	3	fall, even years
IB 449	Limnology*	4	fall, odd years
IB 451	Conservation Biology*	4	spring, odd years
IB 452	Ecosystem Ecology	3	fall, odd years
IB 453	Community Ecology	3	fall, even years
IB 481	Biology of Disease Vectors*	4	spring, even years
IB 482	Insect Pest Management*	4	fall, odd years
IB 483	Insect Pathology*	4	spring, every 3rd year (spring 2012)
IB 484	Biological Control*	3	spring, odd years
IB 485	Environmental Toxicology	3	spring
IB 486	Pesticide Toxicology	3 (U) or 4 (G)	spring, odd years

ADDITIONAL APPROVED IB COURSES

The list below shows the advanced SIB courses that fulfill requirements in the IB major for additional courses. Click here to see the list of IB Advising Options and links to courses suggested for each.

Course No.	Course Title	Credit (hours)	Offered
IB 331 Controlled by ANSC 331	Biology of Reproduction*	3	spring
IB 348 Controlled by NRES 348	Fish and Wildlife Ecology	3	fall
IB 363	Plants and Their Uses	3	spring
IB 421	Photosynthesis	3	fall
IB 425	Plant Secondary Metabolism	3	fall, even years
IB 467	Principles of Systematics*	4	fall, odd years
IB 468	Insect Classification and Evol*	4	fall, odd years
MCB 354	Biochem & Phys Basis of Life	3	fall and spring
MCB 450	Introductory Biochemistry	3	fall and spring

* indicates a laboratory or field component.