

New Undergraduate Program (Majors, Minors, Sequences) Proposal
Illinois State University - University Curriculum Committee

Program Department Biological Sciences

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Title of New Program Sequence in Conservation Biology

Submission Date Monday, August 27, 2012

Email apcappar@ilstu.edu

Campus Address 4120 Biological Sciences

Version 7

Proposed Starting Catalog Year 2014-2016

Associated Course Proposal(s):

Revise Course proposal BSC 305 titled *Biological Evolution*

1. Proposed Action

New Major

New Minor

✓ New Sequence

More than 50% of courses in this program are Distance Education

No Is this program an Integrated Bachelors/Masters degree program?

Sequence Major

Biological Sciences

2. Provide Undergraduate Catalog copy for new program.

Conservation Biology Sequence

Biological Sciences majors selecting this sequence will receive broad training in conservation biology. This sequence is designed for students seeking careers in the conservation of natural ecosystems and their organisms (all levels of biodiversity). The coursework will also prepare students for graduate studies in conservation biology, and for internships and entry-level positions in conservation-oriented non-governmental organizations, state and federal governmental organizations, and environmental consulting firms. The minimum requirements for this sequence are:

— 38 hours in Biological Sciences required.

— Required courses for major (*denotes laboratory course): BSC 196*, 197*, 204

— Required courses for sequence: BSC 201*, 219, 280, and 305.

— Elective courses structured across three Groups as follows: one from the Conceptual Group (BSC 212*, 260*, 286*, 295*, 311, 325, 333*, 375 and 376*), one from the Botany Taxon Group (BSC 211*, 223*, 330*, 335 and 336*), and one from the Zoology Taxon Group (BSC 292*, 294*, 296, 301*, 396*).

— Additional elective courses in Biological Sciences from the three groups as needed to meet a minimum of 16 hours.

— Required courses outside of Biological Sciences: CHE 110 and 112 or 140 and 141; either CHE 220, or CHE 230 and 231; one of the following: PHY 105, 108 or 110; either MAT 120 and 121, or MAT 145 and 146. NOTE: One of the following may substitute for either MAT 121 or 146: ECO 138, GEO 138, or PSY 138.

— BSC 202, 307 and Biological Sciences courses below 195 may not be used in the major.

— A minimum of 12 hours in Biological Sciences courses must be completed at Illinois State University.

3. Provide a description for the proposed program.

The proposed sequence will be part of the Biological Sciences major leading to a B.S. degree in Biological Sciences. Additional requirements in this proposed sequence include: courses in ecology (BSC 201), genetics (BSC 219), biodiversity conservation (BSC 280), evolution (BSC 305) and a minimum of 16 credits in biology coursework structured across three Groups of electives (Conceptual, Botany Taxon, Zoology Taxon) to ensure meeting the requirements of the B.S. in Biological Sciences program of which this is a subdivision and to ensure breadth of education in biological topics related to conservation biology. This sequence is designed to provide students with the background to pursue careers in conservation biology directly after the B.S. degree or to continue their education in a graduate conservation biology program.

4. Provide a rationale of proposed program.

The primary goal of this sequence is to provide students with sufficient educational background to pursue careers or graduate education in conservation biology, a discipline focused on the health of natural ecosystems and their organisms. The courses are organized so as to ensure that sufficient breadth and depth needed to cover key topics in biology that are directly related to conservation while preserving some flexibility in the precise conceptual and taxon courses taken. The sequence will prepare students for internships and entry-level positions in conservation-oriented non-governmental organizations (e.g., The Nature Conservancy), governmental organizations (e.g., state departments of natural resources, federal wildlife and parks agencies), and environmental consulting firms. These employers seek individuals with training that involves ecosystems and their organisms (e.g., plants and animals). Students can track the job and internship market in conservation biology at these websites: jobs.oriongrassroots.org and www.conbio.org/jobs. Students completing this sequence will also be well prepared to enter graduate-level conservation biology programs. Students can explore academic programs across the U.S. at: www.conbio.org/Resources/Programs. Further information on careers can be found in the book **Saving the Earth as a Career: Advice on Becoming a Conservation Professional** (Hunter, M.L., D. Lindenmayer, and A. Calhoun. 2007. Wiley-Blackwell) available in Milner Library.

5. Describe the expected effects of the proposed program on existing campus programs (if applicable).

This sequence is not expected to cause any effects on programs outside of the School of Biological Sciences. The students will already be in the Biological Sciences undergraduate program. We anticipate that this sequence will be a recruitment incentive for students interested in careers in conservation biology. This will either increase the number of students in the School of Biological Sciences, or will provide an alternative career path to the many students who think that the only biological careers are in medicine.

6. Provide a sample four year plan of study demonstrating that a student could realistically complete the program requirements in a specific number of semesters.

Sample plan of study: (*denotes biology course with a laboratory)

	Fall	Spring
First Year		
Major requirements	BSC 197* (4)	BSC 196* (4) IC-Science
Non-core Requirements	CHE 140 (4) IC-Science, MAT 120 (4) or MAT 145 (4)	CHE 141 (4), MAT 121 (4) or MAT 146 (4) MC-QR
General education requirements	ENG 101 or COM 110 (3)	ENG 101 or COM 110 (3)
	15 term total	15 term total
Second Year		
Major requirements	BSC 201* (4),	BSC 219 (3)
Non-core requirements	CHE 230 (3) & CHE 231 (1), or CHE 220 (5)	
Sequence Core		BSC 280 (3)
General education requirements	LAN 111 Foreign Language (4) MC-ICL (3)	LAN 112 Foreign Language (4) MC-IS (3) University Wide Elective (3)
	15 (16) term total	16 term total
Third Year		
Major requirements	BSC 204 (1)	
Sequence electives	BSC Group elective (4) BSC Group elective (4)	BSC Group elective (4)
Non-core requirements		PHY 108 (5)
General education requirements	MC-UST (3) OC-FA (3)	OC-H (3) OC-SS (3)
	15 term total	15 term total
Fourth Year		
Major requirements		BSC 305 (3)
Sequence electives	BSC Group elective (4)	
General Education Requirements	Senior College University Wide Elective (4) Senior College University Wide Elective (3) University Wide Elective (3)	MC-LH (3) University Wide Elective (3) University Wide Elective (3) Senior College University Wide Elective (3)
	14 term total	15 term total
		Total credits = 120

7. Describe the expected curricular changes required, including new courses. If proposals for new courses have also been submitted, please reference those related proposals here:

No curricular changes are required. All courses are in place.

8. Anticipated funding needs and source of funds.

See attached budget rationale.

9. No Does this program count for teacher education?

10. No Is this an Interdisciplinary Studies program?

11. The following questions must be answered.

Yes Have you confirmed that Milner Library has sufficient resources for the proposed program?

No Are more than 124 hours required to complete a degree with this major?

No Beyond General Education, does the major require more than 76 semester hours?

No Does this sequence (if in a major) require more than 55 semester hours of major courses?

No Does this program stipulate specific general education courses offered in the major department/school as a part of the major requirements only if such courses serve as prerequisites for other courses required by the major?

No Is the proposed program intended to be longer than four years (as indicated by the plan of study)?

N.A. Have letter(s) of concurrence from affected departments/schools been obtained?

A departments/school is affected if it has a program with significant overlap or if it teaches a required or elective course in the program.

12. Routing and action summary for New Program:**1. Biological Sciences Department Curriculum Committee Chair***Martha Cook (website)*Signature

Martha Cook

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8/27/2012 9:34:25 AM

Date**2. Biological Sciences Department Chair/School Director***Craig Gatto (website)*Signature

Craig Gatto

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8/27/2012 10:07:33 AM

Date**3. College of Arts & Science College Curriculum Committee Chair***Todd Stewart (website)*Signature

Todd Stewart

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10/10/2012 4:07:06 PM

Date**4. College of Arts & Science College Dean***Sally Parry (website)*Signature

Sally Parry

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Date**5. University Curriculum Committee Chair***Jean Standard (website)*Signature

Jean Standard

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11/7/2012 3:04:29 PM

Date

All new programs (majors, minors, sequences) are routed by the U.C.C. to the Academic Senate
