

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

**Program Department** Biological Sciences

**Initiator** Joe Casto

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**Initiator Department** Biological Sciences

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**Submission Date** Sunday, August 26, 2012

**Email** jmcasto@ilstu.edu

**Campus Address** 4120 Biological Sciences

**Version** 2

**Title of New Program** Physiology, Neuroscience & Behavior Sequence **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.**

**Sequence in Physiology, Neuroscience & Behavior**

Majors selecting this sequence will receive broad training in physiology, neuroscience and behavior. This sequence is designed for students seeking careers that involve basic scientific and applied aspects of behavior, physiology and neuroscience. This sequence will also prepare students for graduate studies in neuroscience, physiology and animal behavior and related fields, and with additional coursework, students can meet the requirements to apply to veterinary and health professional schools. The minimum requirements for this sequence are:

- 37 total credit hours required in Biological Sciences.
- Required courses for major (\*denotes laboratory course): BSC 196\*, 197\*, 204.
- Required courses for sequence: BSC 283\*, 286\*, 327, and 343.
- 14 hours minimum in sequence-related elective courses required, at least one of which must have an associated laboratory and no more than two of these electives satisfying this requirement may be from the Psychology courses identified here: BSC 201\*, 203, 219, 260\*, 290, 292\*, 294, 295, 296, 305, 301\*, 311, 325, 345, 350, 353, 354 367\*, 396\*; PSY 253, 263, 350.
- 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. MAT 145 and 146 are recommended for students interested in applying to graduate programs.
- 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 BS degree. Additional requirements in this proposed sequence include a minimum of 28 credits of coursework spanning organismal and sub-organismal approaches to the study of physiology, neuroscience and behavior. This sequence is designed to provide students with the background to pursue careers in the sequence areas and related fields directly after the BS degree or to continue their education in a graduate or professional degree program.

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**4. Provide a rationale of proposed program.**

The primary goal of this sequence is to provide students with a solid educational background to pursue careers or continuing education in physiology, neuroscience, behavior or related fields. The sequence is specifically designed to provide a focused experience for students interested in physiology, neuroscience, and/or behavior, while providing a breadth of courses within these disciplines. Potential employment includes academic or industry laboratory technical staff, behavioral analysts, histological technician, clinical research specialists, and pharmaceutical sales. Students completing this sequence would also be well prepared to pursue further educational opportunities including graduate programs (MS and PhD), and with additional coursework, to apply to veterinary and health professional schools.

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

No particular effects due to establishment of this sequence are expected on programs outside of the School of Biological Science. The students will already be in the Biological Sciences undergraduate program. We anticipate a modest increase in students in the Biological Sciences program, as by having this undergraduate sequence, additional students may be recruited to the School of Biological Sciences.

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**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.**

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

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

	<b>Fall</b>	<b>Spring</b>
<b>First Year</b>		
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	ENG101 or Com110 (3)	ENG101 or Com110 (3)
	15 term total	15 term total
<b>Second Year</b>		
Major requirements	Physiology, Neuroscience & Behavior Lab Elective (4)	BSC 204 (1)
Non-core requirements	CHE 230 (3) & CHE 231 (1), or CHE220 (5)	
Sequence electives		Physiology, Neuroscience & Behavior Lab Elective* (4), Physiology, Neuroscience & Behavior Elective (3)
General education requirements	LAN111 Foreign Language (4) MC-ICL(3) 15 (16) term total	LAN 112 Foreign Language (4) MC- IS (3) 15 term total
<b>Third Year</b>		
Major required electives	BSC 283* (4)	BSC 343 (3)
Sequence electives	BSC Elective (3)	Physiology, Neuroscience & Behavior Elective (3)
Non-core requirements	PHY 108 (5)	
General education requirements	MC-UST (3)	OC-SS(3) OC-FA(3) OC-H(3) <i>(One of above should qualify for Global Studies designation)</i>
	15 term total	15 term total
<b>Forth Year</b>		
Major requirements	BSC 286* (4)	BSC 327 (3)
Sequence electives	BSC Elective (3)	BSC Elective (3)
General education requirements	Senior College University Wide Elective (4) University Wide Elective (3) 14 term total	MC-LH (3) University Wide Elective (4) Senior College University Wide Elective (3) 16 term total
<b>Total credits =120</b>		

**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:**

There are no expected curricular changes required. All required courses are currently being taught in the School of Biological Sciences.

**8. Anticipated funding needs and source of funds.**

See attached budget rationale.



9. **No** **Does this program count for teacher education?**

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10. **No** **Is this an Interdisciplinary Studies program?**

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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)?

**Yes** 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.*

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**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 9:34:48 AM

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

Craig Gatto

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8/27/2012 10:07:43 AM

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

Todd Stewart

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10/10/2012 4:07:26 PM

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

Sally Parry

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10/10/2012 4:34:06 PM

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

Jean Standard

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11/7/2012 4:50:41 PM

Date

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

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