

UNIVERSITY CURRICULUM COMMITTEE

Minutes #5 approved (2013 Supplement and 2014-2016 Undergraduate Catalog)

October 31, 2012

Members Present: Bernard, Cook, Fontes, Kaesberg, Kennedy, Morenus, Park, Rolando, Schendel, Standard, Temple, Walstrom, Wood

Members Absent: Barroqueiro, Murphy, Rosenthal

Guests Present: Jess Ray, Office of the University Registrar

1. Standard convened the meeting at 3:05 p.m.
2. **APPROVAL OF MINUTES:** Minutes #4, October 17, 2012.

Morenus moved to approve the minutes as amended and Fontes seconded. The minutes were approved as amended by acclamation of the committee.

3. PROPOSAL ACTION:

BSC General Biology Sequence (New) Kaesberg and Fontes

With no further discussion, Kaesberg moved to suspend the practice of “discussion one week, action the next,” and vote on the proposals today, Walstrom seconded, and the committee approved by acclamation. Kaesberg moved to approve the new General Biology Sequence, Fontes seconded, and the committee approved by acclamation. The proposal and Executive Summary will be sent to the Academic Senate for review and approval. Catalog copy follows:

General Biology Sequence

Majors selecting this sequence will receive broad training in the biological sciences. This sequence is designed for students seeking careers in any area of biology. This sequence will also prepare students for graduate studies in Biological Sciences and/or post-baccalaureate professional schools. The minimum requirements for this sequence are:

- **38 hours in Biological Sciences required.**
- **Required courses for the major (*denotes laboratory course): BSC 196*, 197*, and 204.**
- **Required courses for the sequence: BSC 201*, 203, 219, 305.**
- **Students must choose two additional BSC courses with laboratories.**
- **Required courses outside of Biological Sciences: CHE 110 and 112 or 140 and 141, either CHE 220 or 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.**

BSC Conservation Biology Sequence (New) Kaesberg and Fontes

With no further discussion, Kaesberg moved to suspend the practice of “discussion one week, action the next,” and vote on the proposals today, Walstrom seconded, and the committee approved by acclamation. Kaesberg moved to approve the new Conservation Biology Sequence, Fontes seconded,

and the committee approved by acclamation. The proposal and Executive Summary will be sent to the Academic Senate for review and approval. Catalog copy follows:

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 government organizations, and environmental consulting firms. The minimum requirements for this sequence are:

- **38 hours in Biological Sciences required.**
- **Required courses for the major (*denotes laboratory course): BSC 196*, 197*, 204.**
- **Required courses for the 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 Taxon Group: BSC 211*, 223*, 330*, 335 and 336*.**
 - 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; CHE 230 and 231; one of the following: PHY 105, 108 or 110; either MAT 120 and 121 or MAT 145 and 146. NOTE: 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.**

BSC Physiology, Neuroscience and Behavior Sequence (New) Kaesberg and Fontes

With no further discussion, Kaesberg moved to suspend the practice of “discussion one week, action the next,” and vote on the proposals today, Walstrom seconded, and the committee approved by acclamation. Kaesberg moved to approve the new Physiology, Neuroscience and Behavior Sequence, Fontes seconded, and the committee approved by acclamation. The proposal and Executive Summary will be sent to the Academic Senate for review and approval. Catalog copy follows:

Physiology, Neuroscience and Behavior Sequence

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 hours in Biological Sciences required.**
- **Required courses for the 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, 301*, 305, 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; CHE 220 or 230 and 231; one of the following: PHY 105, 108, 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.**

BSC Plant Biology Sequence (New)

Park and Morenus

With no further discussion, Kaesberg moved to suspend the practice of “discussion one week, action the next,” and vote on the proposals today, Walstrom seconded, and the committee approved by acclamation. Park moved to approve the new Plant Biology Sequence, Walstrom seconded, and the committee approved by acclamation. The proposal and Executive Summary will be sent to the Academic Senate for review and approval. Catalog copy follows:

Plant Biology Sequence

Majors selecting this sequence receive broad training in plant biology. This sequence is designed for students seeking jobs with industries, the government and nonprofit organizations working with plants. This sequence will also prepare students for graduate studies in plant biology. The minimum requirements for this sequence are:

- **37 hours in Biological Sciences required.**
- **Required courses for the major (*denotes laboratory course): BSC 196*, 197*, 204.**
- **Required courses for the sequence: 212*, 219, 365.**
- **Elective courses as follows:**
 - One course from the Conceptual Group: BSC 201*, 203, or 260*.**
 - Two courses from the Plant Group: BSC 211*, 223*, 330*, 335 and 336*, 346.**
- **Additional electives in Biological Sciences as needed to achieve the 37 hour minimum.**
- **Students must complete five Biological Sciences courses with laboratories (*).**
- **Research and internships enhance future prospects for employment and acceptance to graduate programs; hence students are strongly encouraged to pursue individual work via one of the following: 2 hours of BSC 287 Independent Study, 2 hours of BSC 398 Professional Practice, or at least 3 hours of BSC 290 Research in Biological Sciences. Students are also encouraged to do a formal senior thesis (for more information see <http://www.bio.IllinoisState.edu/undergrads/thesis.shtml>).**
- **Required courses outside of Biological Sciences: CHE 110 and 112 or 140 and 141; CHE 220, or CHE 230 and 231; one of the following: PHY 105, 108, 110; either MAT 120 and 121, or MAT 145 and 146. NOTE: One of the following may substitute for 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.**

BSC Zoology Sequence (New)**Park and Morenus**

With no further discussion, Kaesberg moved to suspend the practice of “discussion one week, action the next” and vote on the proposals today, Walstrom seconded, and the committee approved by acclamation. Park moved to approve the new Zoology Sequence, Walstrom seconded, and the committee approved by acclamation. The proposal and Executive Summary will be sent to the Academic Senate for review and approval. Catalog copy follows:

Zoology Sequence

Majors selecting this sequence will receive broad training in zoology. This sequence is designed for students seeking careers that involve working with animals. This sequence will also prepare students for graduate studies in Zoology and related fields (e.g., Entomology, Physiology, Wildlife Biology), and with additional coursework, students can meet the requirements to apply to veterinary and health professional schools. The minimum requirements for this sequence are:

- **40 hours in Biological Sciences required.**
- **Required courses for the major (*denotes laboratory course): BSC 196*, 197*, and 204.**
- **Required courses for the sequence: BSC 201*, 283*, 305.**
- **7 hours minimum in organismal zoology electives, at least one with a laboratory: BSC 292*, 294, 296, 301*, 396*.**
- **7 hours minimum in functional zoology electives, at least one with a laboratory: BSC 286*, 295*, 325, 327, 343, 345, 367*.**
- **Required courses outside of Biological Sciences: CHE 110 and 112 or 140 and 141; CHE 220, or CHE 230 and 231; one of the following: PHY 105, 108, 110; either MAT 120 and 121, or MAT 145 and 146. NOTE: One of the following may substitute for 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.**

BSC Organismal Biology and Public Outreach Sequence (Deletion) Walstrom and Barroqueiro

With no further discussion, Kaesberg moved to suspend the practice of “discussion one week, action the next” and vote on the proposals today, Walstrom seconded, and the committee approved by acclamation. Walstrom moved to approve the deletion of the Organismal Biology and Public Outreach Sequence, Temple seconded, and the committee approved by acclamation. This proposal and the Executive Summary will be sent to the Academic Senate for review and approval. Catalog copy to be deleted follows:

Organismal Biology and Public Outreach Sequence:

Majors selecting this sequence seek broad organismal expertise and experience in public outreach for science education. This sequence is designed for students seeking educational jobs and careers in arboreta, botanical gardens, environmental and nature centers, museums, and zoos. The minimum requirements for this sequence are:

- **39 total hours in Biological Sciences required.**
- **Required core courses: BSC 196*, 197*, 201*, 204, 219, and 297.**

- **Additional core courses required: Choose one of the following: BSC 203, 212*, 260* or 283*.**
- **14 hours minimum in organismal courses required, at least two of which must be laboratory courses (*): BSC 211*, 212*, 223*, 280, 283*, 286*, 290, 292*, 294, 295*, 296, 301*, 311*, 325, 327, 330*, 333*, 335/336*, 337*, 375/376*, 396*.**
- **Obtain a minimum of 120 hours of direct experience in public outreach (2 credit hours of Professional Practice, BSC 398.02).**
- **Students must complete five BSC courses with laboratories (*).**
- **Students must pass one BSC course of at least 3 credit hours at the 300-level. BSC 398 does not fulfill this requirement.**
- **Required non-core courses: 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 MAT 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.**

BSC Major in Biological Sciences (Revise)

Walstrom and Barroqueiro

With no further discussion, Kaesberg moved to suspend the practice of “discussion one week, action the next” and vote on the proposals today, Walstrom seconded, and the committee approved by acclamation. Walstrom moved to approve the revision of the Major in Biological Sciences, Temple seconded, and the committee approved by acclamation. Catalog copy follows:

MAJOR IN BIOLOGICAL SCIENCES

- **37-40 hours in Biological Sciences are required (hours are dependent on choice of sequence).**
- **Required courses for the major (*denotes laboratory course): BSC 196*, 197*, 204.**
- **Required courses outside of Biological Sciences: CHE 110 and 112 or 140 and 141; CHE 220, or CHE 230 and 231; one of the following: PHY 105, 108, 110; either MAT 120 and 121, or MAT 145 and 146. NOTE: One of the following may substitute for 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.**
- **Students must complete one of the following sequences: General Biology; Conservation Biology; Physiology, Neuroscience and Behavior; Plant Biology; Zoology; Teacher Education.**

4. PROPOSAL DISCUSSION:

BSC General Biology Sequence (New)

Kaesberg and Fontes

Kaesberg distributed a handout and presented a review of three proposals from the School of Biological Sciences for the creation of the General Biology Sequence, the Conservation Biology Sequence, and the Physiology, Neuroscience and Behavior Sequence. These three sequences (along with two sequences being presented by other reviewers) are being proposed as new sequences in the Major in Biological Sciences. Kaesberg said she was impressed by depth and breadth of the proposed sequences.

- The General Biology Sequence incorporates the requirements of the Biology Teacher Certification Sequence for students that either elect to leave the Biology Teacher Certification program or fail to meet the GPA requirements for Biology teacher education.
- Students in the General Biology Sequence will receive broad training in the biological sciences. This sequence is designed to provide students with the background to pursue careers in biology and related fields directly after the B.S. degree or to continue in graduate or professional degree programs.

Comments/Questions:

- Standard was curious why they answered “no” to the question about impact on faculty and student enrollment. The financial implications form showed enrollment growing for all the sequences over the five-year period. Cook indicated that it was listed that way to reflect the shift in enrollments as seniors graduate from the old programs and freshmen start the new sequences. Cook explained that the School of Biological Sciences expects fewer students in the General Sequence as students choose one of the other more specialty specific sequences, but the numbers will balance out. Some will have less, some more, but overall the major will still have the same number of students.
- Cook said that the General Sequence would be something for students not able to complete the teacher certification sequence and other students who want a more broad general degree rather than a specialty.

BSC Conservation Biology Sequence (New)

Kaesberg and Fontes

Comments/Questions:

- Kaesberg asked why calculus was not required for the Conservation Biology sequence. Also, there was no suggestion of MAT 145 and 146 for those interested in graduate school as was suggested for other sequences.
- Cook said that she didn’t know why some sequence authors suggested MAT 145 (Calculus I) and MAT 146 (Calculus II) and some did not. She will follow up with those who chose not to add the note about MAT 145 and 146 being suggested for those students interested in pursuing graduate study.

BSC Physiology, Neuroscience and Behavior Sequence (New)

Kaesberg and Fontes

Comments/Questions:

- Kaesberg also asked why calculus was not required for the Physiology, Neuroscience and Behavior sequence. They did however recommend students take MAT 145 and 146 if they are interested in graduate school.

There was a discussion of anticipated changes in the enrollment in the Major in Biological Sciences with the addition of the new sequences. Cook didn’t anticipate an immediate increase because the students who would be in the major or the two existing sequences will now just have more choices. Eventually, the new sequences might become appealing and bring in more students.

With no further discussion, Kaesberg moved to suspend the practice of “discussion one week, action the next,” and vote on the proposals today, Walstrom seconded, and the committee approved by acclamation. (See “Proposal Action” above.)

BSC Plant Biology Sequence (New)**Park and Morenus**

Park distributed a handout and presented a review of the proposals for Plant Biology and Zoology, two new sequences in the Major in Biological Sciences.

- The School of Biology's rationale for the new Plant Biology Sequence is to help increase biology majors' job opportunities by closing the disconnect between plant biology graduates and prospective employers, or to prepare students for graduate studies in plant biology.
- This sequence includes ten credit hours of required courses (BSC 212, 219 and 365) plus 14-16 hours of selected elective courses.
- The 37 total required hours stays within university guidelines.
- There is no effect on programs outside of the School of Biological Sciences.
- The new sequence may aid recruitment because a student in this sequence can choose to focus on plant biology in many areas, (e.g., ecology and conservation, plant structure and development, molecular biology or applications of molecular biology to renewable energy) by selecting different electives.
- Park asked how the School of Biological Sciences might handle the variance in the number of students in each new sequence. Some may have few and others many students. Cook answered that they expect that the sequences will attract a different number of students reflecting what they see now in student's interests in different specialties.
- It was noted that the courses 375/376 and 335/336 should be 375 and 376; 335 and 336. Ryburn will replace the slash between the courses with the word "and."
- Also, Ryburn will check with Cook on final catalog copy to make sure that all the sequences are formatted consistently.

BSC Zoology Sequence (New)**Park and Morenus**

- Park stated that the School of Biological Sciences' rationale for adding the new Plant Biology sequence is to help increase biology majors' career opportunities or to prepare them for graduate studies in Zoology and related fields (e.g., Entomology, Physiology, and Wildlife Biology.)
- This sequence includes 11 credit hours of required courses (BSC 201, 283 and 305), 14 hours of selected elective courses, and 16 hours of required courses in Chemistry, Physics, and Mathematics.
- The 40 hours in Biological Sciences stay within university guidelines.
- There is no effect on programs outside of the School of Biological Sciences.
- No curricular changes are expected since the sequence courses are currently being taught.
- The new sequence may aid student recruitment.
- Park noted that the last line of catalog copy on the proposals was repeated and the duplicate line of text needed to be removed. Ryburn will make that change.

With no further discussion, Kaesberg moved to suspend the practice of "discussion one week, action the next," and vote on the proposals today, Walstrom seconded, and the committee approved by acclamation. (See "Proposal Action" above.)

BSC Major in Biological Sciences (Revise)**Walstrom and Barroqueiro**

Walstrom distributed a handout and presented a review of the proposal to revise the Major in Biological Sciences.

- Currently students can choose a major in Biological Sciences and may, in addition, select from one of two sequences: (1) Organismal Biology and Public Outreach, and (2) Teacher Certification, if they wish. Most students do choose a sequence.
- The proposed revisions to the Major would require students to select from one of six sequences: (1) General Biology, (2) Conservation Biology, (3) Physiology, Neuroscience, and Behavior Science, (4) Plant Biology, (5) Zoology, and (6) the existing Teacher Certification.
- The sequences require between 37 and 40 hours in Biological Sciences, well below the 55 hour limitation. The major does not mandate more than 76 hours excluding General Education requirements. The degree program does not require more than 124 hours of course work.
- The chemistry requirements for Honors students have been modified.
- In addition, clarifications have been made to the catalog copy to improve readability and understanding.
- The School of Biological Sciences' rationale for changes to the major is that it is increasingly common for programs in the biological sciences to offer specialized degree programs for undergraduates. At present, the School of Biological Sciences offers only a single program and co-offers the program in Biochemistry and Molecular Biology (BMB) with the Department of Chemistry. The dissolution of the BMB program and formation of a new major in Molecular and Cellular Biology (MCB) is underway.
- In anticipation of the MCB major being approved, the faculty recognized the need for programs that meet the needs of students that were interested in other areas of biology and have designed one general and four specialized sequences to complement the MCB program. They will offer the General Biology sequence that will accommodate students that are interested in broad training in biology, and also sequences in four specialized areas: Conservation Biology; Physiology, Neuroscience and Behavior; Plant Biology; and Zoology.
- The School of Biological Sciences also retains the currently offered sequence in Biology Teacher Certification. Plans are underway to convert the Teacher Certification Sequence into a new Major in Biological Sciences Teacher Education.
- All students enrolled in the School will take a core of courses: BSC 196, 197, and 204.
- Students will then take a set of required courses for their chosen sequence, as well as sequence-designated electives.

Comments/Questions:

- Kaesberg asked if the sequences will be reflected on the B.S. degree and was answered that the sequence would only appear on the student transcript, not on the degree. The degree will continue to be a B.S. in Biological Sciences.
- Standard said that the "37 hours" is misleading as some sequences are more. She suggested 37-40 or not having the hours in the catalog copy for the major since each sequence states the number of hours.
- Each sequence repeats what is in the major. It was suggested that the courses that are common for all the sequences which are actually major requirements be listed under the major and not in each sequence.
- Standard said that the prerequisites for CHE 220, 230 and 231 (which are CHE 110 and 112 or 140 and 141) should be listed in the catalog copy. Ryburn will edit the proposals to add the prerequisites to the list of courses required outside of the School of Biological Sciences.
- Standard also noted that the proposer answered "no" to the question on the proposal, "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" and it should have been answered "yes." Ryburn will edit the proposal and make the requested revisions.

With no further discussion, Kaesberg moved to suspend the practice of “discussion one week, action the next,” and vote on the proposals today, Walstrom seconded, and the committee approved by acclamation. (See “Proposal Action” above.)

BSC Organismal Biology and Public Outreach Sequence Walstrom and Barroqueiro

Walstrom distributed a handout and presented a review of the proposal to delete the Organismal Biology and Public Outreach Sequence.

- The rationale given for deletion of this sequence was that the newly proposed sequences in organismal biology make this sequence redundant and unnecessary. The primary rationale for creation of this sequence was to provide a sequence for students interested in organismal biology. New sequences in Plant Biology, Zoology, and Conservation Biology accomplish the same in three different ways.
- Students will be able to obtain the same education with the new sequences.

With no further discussion, Kaesberg moved to suspend the practice of “discussion one week, action the next,” and vote on the proposals today, Walstrom seconded, and the committee approved by acclamation. (See “Proposal Action” above.)

5. LIAISON REPORTS:

- a. Council on General Education** – Morenus reported that the CGE is still reviewing the catalog copy revisions for the proposed changes in the General Education program.
- b. Council for Teacher Education** – Standard reported that the CTE curriculum committee met and they are reviewing the Special Education program revisions. They also discussed proposed deletion of the Biological Sciences Teacher Certification sequence and the proposed new Major in Biological Sciences Teacher Education.
- c. Academic Affairs Committee** – Fontes reported that the Academic Affairs Committee met and had a brief conversation about the University Curriculum Committee and indicated that they were a group the committee could go to if there were issues or concerns. They also discussed the annual Diversity Report and the research that Rosenthal prepared on scheduling. Fontes wanted to underscore that there is no proposal for changing course scheduling. The committee is gathering information only at this time.

6. MISCELLANEOUS:

Standard asked the committee members to let her know if anyone needed their annual letters she prepares for their tenure and promotion files earlier. Otherwise they will be done in time for the January reviews.

- 7. STAFF REPORT:** Ryburn reported that she met with Nancy Latham from Curriculum and Instruction to discuss their plans to submit changes to courses required for professional education which will impact the secondary education programs on campus and in the catalog. They plan to:
 - (1) remove C&I 214, one of the required courses;
 - (2) add C&I 219, a new course; and
 - (3) revise C&I 212, an existing course.

Currently, C&I 212, 214, and 216 are required for professional education. Ryburn asked for a consensus of the committee as to whether this can be handled as a blanket change for all secondary education programs by way of an e-mail to departments and schools and a blanket approval after affirmative responses are received by all. Nancy Latham reported that these changes will not result in a change in the hours. The committee agreed that the secondary education changes could be done (for all departments and schools impacted) by a blanket request and approval. Ryburn will bring the proposed changes to the committee after the C&I course changes have been submitted and approved.

8. **ADJOURNED:** Schendel moved to adjourn the meeting and Fontes seconded. The meeting was adjourned at 4:20 p.m. The next meeting will be held on November 14, 2012.
9. **INFORMATION:** The University Curriculum Committee Executive Secretary approved the following:

New Course (*for the 2013 Supplement to the 2012-2014 Undergraduate Catalog*):

BSC

398.02 PROFESSIONAL PRACTICE: INTERNSHIP IN PUBLIC OUTREACH

1-6 sem. hrs.

Practical first-hand experience in educating the general public about science at a botanical garden or arboretum, aquarium, park, nature center, museum, zoo, or similar facility. One credit hour per minimum of 50-60 hours of outreach experience. CR/NC only. May be repeated; maximum of 6 hours Internship in Public Outreach; not more than 4 hours from BSC 290, 298.01, 299, 305, or 398 may be counted toward major requirements. Prerequisites: Junior standing in BSC major with 2.50 GPA in all natural sciences and enrolled in Conservation Biology, Plant Biology, or Zoology sequence. Consent of department Professional Practice internship supervisor.

Temporary Courses:

PHI

289.26 METAPHICS

3 sem. hrs.

A study of basic problems in metaphysics, e.g., the nature and reality of persons, God, space, time, and matter. May be repeated once for credit with the approval of instructor if content is significantly different.

289.38 FREEDOM AND RESPONSIBILITY

3 sem. hrs.

Explores philosophical debates about free will and moral responsibility in the Western tradition, emphasizing both contemporary and historical texts.

POL

289.94 CONGRESS AND WAR

2 sem. hrs.

Examination of congressional war powers and their applications in the 20th and 21st century.

Revised Course (*For the 2014-2016 Undergraduate Catalog*):

BSC

(changed number, title, hours)

305 BIOLOGICAL EVOLUTION

3 sem. hrs.

Origin of life, molecular evolution, mechanisms of evolutionary change, natural selection, speciation, and contemporary issues in evolutionary biology. Formerly BSC 297. Prerequisites: BSC 196 and 197; junior or senior standing.

Editorial Request (*For the 2014-2016 Undergraduate Catalog*):

CHE

(added restriction)

342 GENERAL BIOCHEMISTRY I

3 sem. hrs.

Survey of the structure-function relationships of proteins, carbohydrates, lipids and nucleic acids, dynamic equilibria, energetics, reaction kinetics/mechanisms and metabolism. Not for credit if had CHE 242. Not for credit in Master of Science in Chemistry. Prerequisite: Grade of C or better in CHE 232 or 1 year of organic chemistry or consent of instructor.