CGS Agenda Item: 13-03
Effective: Fall 2013

Eastern Illinois University

REVISED COURSE PROPOSAL

(Approved by CAA on 9/29/11 and CGS on 10/18/11, Effective Fall 2011)

This format is to be used for all courses submitted to the Council on Academic Affairs and/or the Council on Graduate Studies.

Please check one: ___ New course _**X**_ Revised course

PART I: CATALOG DESCRIPTION

1. **Course prefix and number, *such as ART 1000*:** BIO 4956
2. **Title (*may not exceed 30 characters, including spaces*):** Mammalogy
3. **Long title, if any (*may not exceed 100 characters, including spaces*):** Mammalogy
4. **Class hours per week, lab hours per week, and credit [*e.g., (3-0-3)*]:** 2-3-3
5. **Term(s) to be offered:** _**X**_ Fall ___ Spring ___ Summer ___ On demand
6. **Initial term of offering:** _**X**_ Fall ___ Spring ___ Summer **Year:** __2013__

Course description: A study of mammals with emphasis on mammalian evolution, classification, distribution, physiology, natural history and ecology.

7. **Registration restrictions:**
   a. **Equivalent Courses**
      - **Identify any equivalent courses** (e.g., cross-listed course, non-honors version of an honors course). There are no equivalent courses.
      - Indicate whether coding should be added to Banner to restrict students from registering for the equivalent course(s) of this course. ___ Yes ___ No

   b. **Prerequisite(s)**
      - **Identify the prerequisite(s),** including required test scores, courses, grades in courses, and technical skills. Indicate whether any prerequisite course(s) MAY be taken concurrently with the proposed/revised course. BIO 3800 or permission of instructor
      - Indicate whether coding should be added to Banner to prevent students from registering for this course if they haven't successfully completed the prerequisite course(s). _**X**_ Yes ___ No

        If yes, identify the minimum grade requirement and any equivalent courses for each prerequisite course: D

   c. **Who can waive the prerequisite(s)?**
      ___ No one ___ Chair _**X**_ Instructor ___ Advisor ___ Other (Please specify)

   d. **Co-requisites** (course(s) which MUST be taken concurrently with this one):

   e. **Repeat status:** _**X**_ Course may not be repeated.

      ___ Course may be repeated once with credit.

      Please also specify the limit (if any) on hours which may be applied to a major or minor.

f. Degree, college, major(s), level, or class to which registration in the course is restricted, if any: N/A

g. Degree, college, major(s), level, or class to be excluded from the course, if any: N/A

8. Special course attributes [cultural diversity, general education (indicate component), honors, remedial, writing centered or writing intensive]
N/A

9. Grading methods (check all that apply): **_X_** Standard letter ___ CR/NC ___ Audit ___ ABC/NC ("Standard letter"—i.e., ABCDF--is assumed to be the default grading method unless the course description indicates otherwise.)

Please check any special grading provision that applies to this course:

___ The grade for this course will not count in a student's grade point average.

___ The credit for this course will not count in hours towards graduation.

If the student already has credit for or is registered in an equivalent or mutually exclusive course, check any that apply:

___ The grade for this course will be removed from the student's grade point average if he/she already has credit for or is registered in _____ (insert course prefix and number).

___ Credit hours for this course will be removed from a student's hours towards graduation if he/she already has credit for or is registered in _____ (insert course prefix and number).

10. Instructional delivery method: (Check all that apply.)

___ lecture ___ lab **_X_** lecture/lab combined ___ independent study/research
___ internship ___ performance ___ practicum or clinical ___ study abroad
___ Internet ___ hybrid ___ other (Please specify)

PART II: ASSURANCE OF STUDENT LEARNING

1. List the student learning objectives of this course:

a. If this is a general education course, indicate which objectives are designed to help students achieve one or more of the following goals of general education and university-wide assessment:
- **EIU graduates will write and speak effectively.**
- **EIU graduates will think critically.**
- **EIU graduates will function as responsible citizens.**

b. If this is a graduate-level course, indicate which objectives are designed to help students achieve established goals for learning at the graduate level:
- **Depth of content knowledge**

- **Effective critical thinking and problem solving**
- **Effective oral and written communication**
- **Advanced scholarship through research or creative activity**

Students will:

- Identify traits and life histories of mammalian orders and key families
  (depth of knowledge, critical thinking)
- Elucidate taxonomic relationships of mammalian groups and evolutionary pressures that gave rise to them
  (depth of knowledge, critical thinking)
- Explore ecological concepts as they apply to mammals
  (depth of knowledge, critical thinking, written communication)
- Learn laboratory techniques for identifying mammals based on skull and dental characteristics and preparing museum specimens
  (depth of knowledge, critical thinking, research)
- Learn field methods for studying mammals, including capture, marking and passive observation sampling techniques
  (depth of knowledge, critical thinking, research)
- Apply lab and field methods to answer contemporary questions in mammalian evolution, behavior, ecology and conservation
  (depth of knowledge, problem solving, written communication, research/creative activity)

2. Identify the assignments/activities the instructor will use to determine how well students attained the learning objectives:

	Lecture exams (35%)	Laboratory exams (20%)	Lab/field exercises (20%)	Specimen preparation (10%)	Review & critique of paper from primary literature (15%)
Identify traits and life histories	X	X	X	X	
Elucidate taxonomic relationships	X	X	X	X	
Explore ecological concepts as they apply to mammals	X	X	X		X
Learn laboratory techniques			X	X	
Learn field methods			X		
Apply lab and field methods to contemporary questions/problems			X		X

3. Explain how the instructor will determine students' grades for the course:

Course grade will be based on:
Lecture midterm and final exams 35%, laboratory exams 20%, indoor lab/outdoor field exercises 20%, museum specimen preparation (skulls and skins) 10%, and review and critique of a paper from the primary literature 15%.

4. **For technology-delivered and other nontraditional-delivered courses/sections, address the following:**
   a. **Describe how the format/technology will be used to support and assess students' achievement of the specified learning objectives:**
   b. **Describe how the integrity of student work will be assured:**
   c. **Describe provisions for and requirements of instructor-student and student-student interaction, including the kinds of technologies that will be used to support the interaction (e.g., e-mail, web-based discussions, computer conferences, etc.):**

   N/A

5. **For courses numbered 4750-4999, specify additional or more stringent requirements for students enrolling for graduate credit. These include:**
   a. **course objectives;**
   b. **projects that require application and analysis of the course content; and**
   c. **separate methods of evaluation for undergraduate and graduate students.**

   Students taking this course for graduate credit will be held to higher expectations and more stringent grading criteria. This will be evaluated on level of development of essay answers on lecture exams, responses to laboratory exercises, and written assignments (i.e., critique of a peer-reviewed paper). Graduate students will be required to develop a more comprehensive analysis in their critique and will be required to present an oral summary of the paper and their critique to the class.

6. **If applicable, indicate whether this course is writing-active, writing-intensive, or writing-centered, and describe how the course satisfies the criteria for the type of writing course identified. (See Appendix *.)**

   N/A

PART III: OUTLINE OF THE COURSE

Provide a week-by-week outline of the course's content. Specify units of time (e.g., for a 3-0-3 course, 45 fifty-minute class periods over 15 weeks) for each major topic in the outline. Provide clear and sufficient details about content and procedures so that possible questions of overlap with other courses can be addressed. For technology-delivered or other nontraditional-delivered courses/sections, explain how the course content "units" are sufficiently equivalent to the traditional on-campus semester hour units of time described above.

Week		Topic
1	Lecture:	Introduction, defining characteristics, mammalian evolution
	Lab:	*Indoor: Skull*
2	Lecture:	Biogeography, integument, locomotion
	Lab:	*Indoor: Dentition, horns/antlers*
3	Lecture:	Feeding modes, digestive system, senses, biological rhythms
	Lab:	*Indoor: Postcranial skeleton, locomotion, integument*
4	Lecture:	Physiological ecology
	Lab:	*Indoor (identification): Didelphimorphia, Soricomorpha and Chiroptera*
5	Lecture:	Reproduction; Orders: Monotremes, Marsupials
	Lab:	*Field: Roost counts, mist-netting, acoustics (Chiroptera)*
6	Lecture:	Orders: "Insectivora", Macroscelidea, Scandentia, Dermoptera; ***Lecture Exam 1***
	Lab:	*Field: Pitfall traps (Soricomorpha)*

7	Lecture:	Orders: Rodentia, Lagomorpha
	Lab:	***Lab Exam 1***
8	Lecture:	Orders: Xenarthra, Pholidota, Tubulidentata, Carnivora
	Lab:	*Indoor (identification): Rodentia, Lagomorpha*
9	Lecture:	Orders: Chiroptera, Primates, Cetacea
	Lab:	*Field: Live traps/box traps (Rodentia)*
10	Lecture:	Orders: Proboscidea, Hyracoidea, Sirenia, Perissodactyla, Artiodactyla
	Lab:	*Indoor (identification): Carnivora, Artiodactyla, Perissodactyla*
11	Lecture:	Communication; ***Lecture Exam 2***
	Lab:	*Indoor: Museum specimen preparation*
12	Lecture:	Sexual selection, parental care, mating systems
	Lab:	*Field: Live traps/cage traps (Didelphimorphia, Carnivora, Lagomorpha)*
13	Lecture:	Social organization, behavior, habitat selection, movement
	Lab:	*Field: Deer check station (aging, sexing, diseases)*
14	Lecture:	Graduate student presentations
	Lab:	*Field: Camera "traps", bait/scent stations, mammalian sign*
15	Lecture:	Parasites and disease, conservation biology
	Lab:	***Lab Exam 2***

PART IV: PURPOSE AND NEED

1. Explain the department's rationale for developing and proposing the course.

This course traditionally has been offered with a two-hour lab and is being expanded to a three-hour lab without any change in credit hours. Mammalogy is an important course because it deals with the taxonomic group that contains humans, and we can learn much about our species through the study of this animal class. Additionally, non-human mammals are an integral part of our society and have much value in terms of resources, ecosystem services, pets, and recreation (e.g., sport hunting). Mammalogy, like Ornithology and Herpetology, is a central course for students pursuing careers in wildlife ecology, management and/or conservation.

The laboratory component of the course is designed to provide students with hands-on experience identifying and preparing specimens in the lab, as well as observing them in their natural environment during field trips. The two-hour lab period limited the types of indoor and outdoor exercises that could be completed, reduced the amount of time students had to observe the species, and restricted the sites that could be visited during field trips. Adding an hour to the laboratory period is necessary to provide the students sufficient time to become familiarized with the species and the methods used to study them. This change will also bring BIO4956 into accord with comparable 4000 level courses, specifically BIO4950 Ichthyology, BIO4952 Herpetology and BIO4954 Ornithology.

a. If this is a general education course, you also must indicate the segment of the general education program into which it will be placed, and describe how the course meets the requirements of that segment.

N/A

b. If the course or some sections of the course may be technology delivered, explain why.

N/A

2. **Justify the level of the course and any course prerequisites, co-requisites, or registration restrictions.**
   The level of this course will remain unchanged. The level of this course is in accord with other similar 4000 level courses (BIO4950 Ichthyology, BIO4952 Herpetology, BIO4954 Ornithology and BIO4964 Entomology).

3. **If the course is similar to an existing course or courses, justify its development and offering.**

   a. **If the contents substantially duplicate those of an existing course, the new proposal should be discussed with the appropriate chairpersons, deans, or curriculum committees and their responses noted in the proposal.**
   The proposed course includes a small subset of techniques covered in BIO5372 Wildlife Techniques; however, in BIO4956 the emphasis is on the species being observed or captured using such methods (e.g., species identification, natural history, etc.), whereas BIO5372 focuses on the techniques themselves, their proper application, and the interpretation of resulting data. Additionally, the proposed course focuses on the specific application of these methods for studying mammals, whereas BIO5372 addresses all wildlife taxa not just mammals.

   b. **Cite course(s) to be deleted if the new course is approved. If no deletions are planned, note the exceptional need to be met or the curricular gap to be filled.**
   N/A

4. **Impact on Program(s):**

   a. **For undergraduate programs, specify whether this course will be required for a major or minor or used as an approved elective.**

      This course will be an approved elective for undergraduate students in the Biological Sciences.

   b. **For graduate programs, specify whether this course will be a core requirement for all candidates in a degree or certificate program or an approved elective.**

      This course will be an approved elective for graduate students in the Biological Sciences.

   If the proposed course changes a major, minor, or certificate program in or outside of the department, you must submit a separate proposal requesting that change along with the course proposal. Provide a copy of the existing program in the current catalog with the requested changes noted.

PART V: IMPLEMENTATION

1. **Faculty member(s) to whom the course may be assigned:**
   The course will be taught by Dr. Jill Deppe or any qualified member of the Biological Sciences Department.

   If this is a graduate course and the department does not currently offer a graduate program, it must document that it employs faculty qualified to teach graduate courses.

2. **Additional costs to students:**
   $25.00 laboratory fee. A request for an increase to $40 is pending with the President's Council and is anticipated by FA13

   Include those for supplemental packets, hardware/software, or any other additional instructional, technical, or technological requirements. (Course fees must be approved by the President's Council.)

3. **Text and supplementary materials to be used (Include publication dates):**
   - Feldhamer, G. A., L. C. Drickamer, S. H. Vessey, J. F. Merritt, and C. Krajewski. 2007. Mammalogy: adaptation, diversity, and ecology. 3rd edition. Johns Hopkins University Press.
   - Hofmann, J. E. 2008. Field Manual of Illinois Mammals. Illinois Natural History Survey Manual 12.

PART VI: COMMUNITY COLLEGE TRANSFER

If the proposed course is a 1000- or 2000-level course, state either, "A community college course may be judged equivalent to this course" OR "A community college course will not be judged equivalent to this course." A community college course will not be judged equivalent to a 3000- or 4000-level course but may be accepted as a substitute; however, upper-division credit will not be awarded.

PART VII: APPROVALS

Date approved by the department or school: 01-22-2013

Date approved by the college curriculum committee: February 1, 2013

Date approved by the Honors Council *(if this is an honors course):*

Date approved by CAA: February 14, 2013 CGS:

*In **writing-active courses**, frequent, brief writing activities and assignments are required. Such activities -- some of which are to be graded – might include five-minute in-class writing assignments, journal keeping, lab reports, essay examinations, short papers, longer papers, or a variety of other writing-to-learn activities of the instructor's invention. Writing assignments and activities in writing-active courses are designed primarily to assist students in mastering course content, secondarily to strengthen students' writing skills. In **writing-intensive courses**, several writing assignments and writing activities are required. These assignments and activities, which are to be spread over the course of the semester, serve the dual purpose of strengthening writing skills and deepening understanding of course content. At least one writing assignment is to be revised by the student after it has been read and commented on by the instructor. In writing-intensive courses, students' writing should constitute no less than 35% of the final course grade. In **writing-centered courses** (English 1001G, English 1002G, and their honors equivalents), students learn the principles and the process of writing in all of its stages, from inception to completion. The quality of students' writing is the principal determinant of the course grade. The minimum writing requirement is 20 pages (5,000 words).

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