

## Syllabus: Mammalogy (EBIO 4760/5760)

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**Description:** This is a lecture and lab course with the goal of providing a foundational understanding of the study of mammals. The lecture and lab will cover the origin, evolution, adaptation, biogeography, physiology, ecology, behavior, and taxonomy of mammals of the world, NA, and Colorado. The lab uses mammal skins, bones, and/or tissues. The prerequisites include the General Biology Lecture Courses (EBIO 1210 & 1220). This is an upper division course—we will delve much deeper into the subject matter and require a larger time-commitment to fully comprehend the material. For that reason, sophomore students need to see me about participation in this course.

**Instructor:** Dr. Christy M. McCain  
Assistant Professor in EBIO & Curator of Vertebrates  
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Office: MCOL E190C  
Office Hours: Monday & Tuesday 10-11:30am & by appointment

**Teaching Assistant:** Abbey Paulson  
EBIO Graduate Student  
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Office: MCOL E266  
Office Hours: Wednesday 2-3pm, Friday 10-12am & by appointment

**Lecture:** MWF 9:00-9:50am

**Lecture Location:** Duane Physics G2B60

**Lab:** Tuesday or Thursday 2-4:50pm

**Lab Location:** Museum Collections (AKA Bruce Curtis Bldg) E280

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**Required Text:** (1) **Mammalogy: adaptation, diversity, and ecology**, 3<sup>rd</sup> edition. Feldhamer, G. A., L. C. Drickamer, S. H. Vessey, J. F. Merritt, and C. Krajewski. 2007. John Hopkins Press. [Cheap used copies available at Amazon.com; also on reserve at Norlin Library]  
(2) **Mammalogy Lab Manual**—available for free download by lab on CULearn.

**Other good mammalogy sources, but not required:**

Animal Diversity Web. (<http://animaldiversity.ummz.umich.edu/site/accounts/information/Mammalia.html>).

Fitzgerald, J. P., C. A. Meaney, and D. M. Armstrong. 1994. *Mammals of Colorado*. Colorado Associated University Press, Niwot, and Denver Museum of Natural History, Denver.

Jones, J. K., Jr., and R. W. Manning. 1992. *Illustrated key to skulls of genera of North American land mammals*. Texas Tech University Press, Lubbock.

Lawlor, T. E. 1979. *Handbook to the orders and families of living mammals*. Mad River Press, Arcata.

Vaughn, T. A., J. M. Ryan, and N. J. Czaplewski. 1999. *Mammalogy*, 4<sup>th</sup> edition. Brooks Cole.

**Course Schedule:** A preliminary schedule of lectures and labs is attached. Lecture and lab topics and dates are subject to change. Reading assignments for each week of lecture and lab are specified.

**Labs:** It should be obvious that attendance at the lab sections is essential. You can probably find a way to work around missing an occasional lecture, but labs cannot be made up once the week is over and the

specimens have been put away. If you must miss your assigned lab during some week, attend the other lab section. Let the lab instructor know you're there. Because labs are so important in this class, we do keep track of attendance. Five points will be subtracted from your final grade for every lab missed.

**Exams:** There will be 2 lecture exams and a cumulative final exam. There will be 3 lab exams, not cumulative but each does build upon the previous sections. Each exam is worth 100 pts. Questions will be fill-in the blank, short answers, and paragraph form. Each exam will include additional questions for graduate-level students only (EBIO 5760) worth an additional 25 pts. The final exam is scheduled on Monday, 14 Dec. 2009 at 1:30-4pm.

**Grading:** As a rule-of-thumb, grades will be awarded as follows: 90-100% = A; 80-89% = B; 70-79% = C; 60-69% = D; below 60% = F. Borderline cases = "+" & "-".

<u>Activity:</u>	<u>Undergrad Level (4760):</u>	<u>Graduate Level (5760):</u>
Lecture Exams (100 pts each)	200 points	250 points
Lab Exams (100 pts each)	300 points	375 points
Final Exam	100 points	125 points
Graduate Project:	N / A	100 points
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Total	600 points	850 points

**Graduate Project (EBIO 5760 only):** Each student will choose a mammal species to compile a detailed literature study. This will be of publishable quality for a species account in *Mammalian Species* ([http://www.science.smith.edu/departments/Biology/VHAYSEN/msi/msi\\_intro.html](http://www.science.smith.edu/departments/Biology/VHAYSEN/msi/msi_intro.html)) and on the **Animal Diversity Web** (<http://animaldiversity.ummz.umich.edu/site/accounts/information/Mammalia.html>). "Each uniform account will summarize the current understanding of the biology of an individual species including systematics, distribution, fossil history, genetics, anatomy, physiology, behavior, ecology, and conservation." The accounts will vary in length depending upon what is known about the species, but should be (≥ 10 pages, double spaced, 1 inch margins, following *Mammalian Species* format (e.g., [http://www.science.smith.edu/departments/Biology/VHAYSEN/msi/pdf/767\\_Chaetodipus\\_penicillatus.pdf](http://www.science.smith.edu/departments/Biology/VHAYSEN/msi/pdf/767_Chaetodipus_penicillatus.pdf)). The account also must be modified for submission to the **Animal Diversity Web** (e.g., [http://animaldiversity.ummz.umich.edu/site/accounts/information/Ochotona\\_collaris.html](http://animaldiversity.ummz.umich.edu/site/accounts/information/Ochotona_collaris.html)). For high quality projects, we can work together to submit the manuscript to *Mammalian Species* for publication. The choice of the species is critical; it cannot currently be covered on either the ADW or MS (<http://www.science.smith.edu/departments/Biology/VHAYSEN/msi/msigenus.html>), so check both websites carefully. Also, you do not want to choose a species that has too much literature to summarize (e.g. *Peromyscus maniculatus*) or a species that has too little literature to summarize (e.g. *Sigmodontomys aphantus*). Please meet with Dr. McCain to okay your species choice and we will contact both ADW and MS to make sure no one is currently working on that species and make a contract.

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**Administrative Reminders:**

1. If you qualify for accommodations because of a disability, please submit to Dr. McCain a letter from Disability Services in a timely manner (by end of second week of classes) so that your needs may be addressed. Disability Services determines accommodations based on documented disabilities. Contact: 303-492-8671, Willard 322, and <http://www.Colorado.EDU/disabilityservices>.

2. Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class, there will be one opportunity for make-up exams: lecture exams outside of class within two days of the exam, and lab exams either Tuesday or Thursday of exam week. For additional absences please talk to me in advance, so we can work out additional accommodations. See full details at [http://www.colorado.edu/policies/fac\\_relig.html](http://www.colorado.edu/policies/fac_relig.html)

3. Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. See policies at <http://www.colorado.edu/policies/classbehavior.html> and at [http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student\\_code](http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student_code)

4. The University of Colorado at Boulder policy on Discrimination and Harassment, the University of Colorado policy on Sexual Harassment and the University of Colorado policy on Amorous Relationships apply to all students, staff and faculty. Any student, staff or faculty member who believes s/he has been the subject of discrimination or harassment based upon race, color, national origin, sex, age, disability, religion, sexual orientation, or veteran status should contact the Office of Discrimination and Harassment (ODH) at 303-492-2127 or the Office of Judicial Affairs at 303-492-5550. Information about the ODH, the above referenced policies and the campus resources available to assist individuals regarding discrimination or harassment can be obtained at <http://www.colorado.edu/odh>

5. All students of the University of Colorado at Boulder are responsible for knowing and adhering to the academic integrity policy of this institution. Violations of this policy may include: cheating, plagiarism, aid of academic dishonesty, fabrication, lying, bribery, and threatening behavior. All incidents of academic misconduct shall be reported to the Honor Code Council ([honor@colorado.edu](mailto:honor@colorado.edu); 303-725-2273). Students who are found to be in violation of the academic integrity policy will be subject to both academic sanctions from the faculty member and non-academic sanctions (including but not limited to university probation, suspension, or expulsion). Other information on the Honor Code can be found at <http://www.colorado.edu/policies/honor.html> and at <http://www.colorado.edu/academics/honorcode/>