

## OEB 101: Biology of Mammals

### Instructors:

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Office hours: Wednesday 10:30-11:30 a.m. and by appointment

### Teaching fellows:

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Tuesday 11-12 am

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### Classroom and time:

Lecture: Tu/Th 1:00–2:30p, MCZ 101  
Lab: Tu 3:00-6:00pm or Wed 2:30–5:30pm, Northwest Laboratory Building room B311  
(third floor of the basement)

Lecture exams: Thursday, October 19  
Thursday, November 30

Lab practicals: Tuesday/Wednesday, October 10/11  
Tuesday/Wednesday, December 5/6

Final Project Due: Friday, December 15<sup>th</sup>, 11:59 pm

Prerequisites: This course has no specific prerequisite, but a basic background in biological sciences, such as that provided by OEB 10, will be assumed. Students without such a background will have to do additional reading, some of which will be available in the textbook. The faculty and teaching fellows can provide guidance as necessary. **Freshmen may lack sufficient background and should consult with the faculty before enrolling in this course.**

Textbook: George A. Feldhamer, Lee C. Drickamer, Stephen H. Vessey, Joseph F. Merritt, and Carey Krajewski. 2015. *Mammalogy: Adaptation, Diversity, Ecology*, 4<sup>th</sup> edition: Johns Hopkins University Press. Available in hardcover and in Kindle edition for purchase or rent on

Amazon. Note that this edition is substantially revised in important ways from the third edition; I don't recommend using an older edition.

Course website: <https://canvas.harvard.edu/courses/31128>

Readings: Recommendations for additional reading will be posted on the course website and during lectures.

Videos: The 10-part series *Life of Mammals*, produced by the BBC and hosted by David Attenborough, will be required viewing for the course. Videos can be purchased on Amazon and viewed on Kanopy Streaming (<http://harvard.kanopystreaming.com/video/life-mammals>), Hulu and other sites, and two copies will be on reserve in Cabot. Additional videos may be assigned for viewing throughout the course.

Field trips: There will be two one-day weekend field trips. On Sunday, October 1<sup>st</sup>, we will go on a three-hour whale watching trip out of Boston Harbor. Students must be at the Central Wharf no later than 11:30 a.m. for a 12 p.m. departure. The cost of the trip is paid for by the course. The company guarantees that we'll see whales! More information can be found at <http://www.bostonharborcruises.com/whale-watch/>.

The second trip will be to the Franklin Park Zoo on Sunday, October 29. Details are still being worked out, but we'll probably spend about three hours at the zoo. Depending on course enrollment, a second date for this visit may be arranged.

Students missing a field trip will be required to present an additional Species Account iMovie (see below)

OEB 101 is an introduction to the biology of mammals. In this course, students will gain familiarity with the diversity of mammals, as well as a deep understanding of their anatomy, physiology, behavior, ecology and evolution. A weekly laboratory will provide the opportunity to see the diversity of mammals first-hand.

OEB 101 meets for lecture twice a week, beginning at 1:00p on Tu/Th in MCZ 101. Labs meet on Tuesday and Wednesday afternoons in Northwest Laboratory Building room B311 (third floor of the basement); they primarily, but not entirely, will focus on examination of museum skeletal and preserved material. All students are expected to attend every lecture and lab session.

Course evaluation will be based upon the following:

Lecture exams* (2):	20% each
Lab practicals (2):	15% each
Species Account iMovie or costume	5%
Project:	25%

\*make-up exams will be oral examinations

For the Species Account iMovie project, students will choose one mammal species and prepare a short oral presentation on that species, to be delivered during the lab session in which that species is covered. No more than four species accounts will be permitted in any lab. Students should choose their species early and sign up in advance to avoid getting blocked out of the lab session they desire. Species accounts should cover the natural history of a species and should be 1-2 minutes long.

Instead of an iMovie, students may appear in class on Tuesday, October 31<sup>st</sup> with a costume depicting a particular mammal species. Costumes must represent a real effort to portray the appearance of the species! Any student with a better costume than Professor Losos' (as determined by the teaching fellows) will receive an A for the exam of his/her choice.

Students missing either of the field trips will be assigned a second species account (or a third, if both field trips are missed).

Students have three options for the project, which will be due on Friday, December 15<sup>th</sup> at 11:59 pm:

1) Write a 10–15-page term paper on a topic pertinent to mammalogy. These papers are meant to be research papers in which students investigate a controversial topic, review the arguments, and present a thesis. Sample topics: Is the Island Rule a valid generalization about the evolution of size of mammals on islands? Are tree shrews closely related to primates?

2) Prepare a mini-documentary using iMovie or other software on a topic pertinent to mammalogy. These presentations are meant to rely on in-depth literature research to the same extent as a term paper, but the final product will be presented audiovisually, rather than in writing. Movies should be 7-12 minutes long.

3) Create or extensively overhaul a Wikipedia page on some topic pertinent to mammalogy. The depth of material coverage is expected to be equivalent to that of a term paper. The Wikipedia page must get approved by Wikipedia and go live by December 15th.

Topics for all projects must be approved in advance. Students should consult the teaching staff to discuss these options. Students will be expected to declare their project type and topic by no later than October 26<sup>th</sup> and hopefully sooner; Wikipedia pages, in particular, need to be begun early to make sure they get approved by the end of the semester.

iMovie Training: Students can sign up for their Harvard sponsored membership to Lynda tutorials, including excellent iMovie options, at [Lynda.harvard.edu](http://Lynda.harvard.edu). In addition, the Multimedia Lab in Lamont Library is available where students can work on their projects, save files for the semester, and ask questions of the staff. If there is interest, the library staff can customize a one hour long workshop for up to 15-20 students at a time in their instructional room within the library. This covers the material from the Lynda tutorials, but also questions about storyboarding, where to borrow equipment, royalty and copyright-free sources, and credit citations.