

Instructor: Prof. Corey Goldman
corey.goldman@utoronto.ca, 416-978-7163, ES 3045C

TAs: Derek Larson Laura Heslin Piper
derek.larson@mail.utoronto.ca laura.heslinpiper@mail.utoronto.ca

Calendar description: Diversity and biology of mammals. Lecture topics include: classification, reproductive strategies, locomotion, feeding, social behaviour and mating systems, biogeography, and conservation. In labs, students learn the distinguishing characteristics of the 28 mammalian orders and to identify 60 species of Ontario mammals. **Prerequisite:** BIO(120H1, 220H1)/150Y1

Course objectives: This course acquaints students with the identification, classification, evolutionary relationships, distribution, and adaptive strategies of living mammals. Including morphological, physiological, and behavioural adaptations for feeding, locomotion, homeostasis, and reproduction. In labs, students learn to identify mammals and their diverse adaptations. Lectures and labs are integrated; two quizzes, Mid-term Test, and Final Exam cover lecture and lab material. The bell-ringer Lab Exam assesses the ability of students to identify mammals and their adaptations. The Final Exam is cumulative and evaluates the ability to synthesize all course material. The course manual is required reading; additional required readings may also be assigned.

Lectures: Thursday, 3:10-5:00. Location: SS1086. (Classes on Oct. 9 and Nov. 6 will be held at the Royal Ontario Museum; further details to follow.)

Labs: Tuesday, 2:10 to 5:00, in RW 013.

Required materials: *EEB388H Biology of Mammals – Fall 2014 Manual*. Available for purchase at the first class on Tues. Sept. 9 (not from U of T Bookstore). Cost: \$15 cash (covers cost of printing and 3-ring binder). A manual from a previous year is not suitable as there are many revisions for Fall 2014.

Reference materials: The following texts have been used as resource materials when preparing course materials. A copy of each is on short-term loan in the Gerstein Library.

- *Mammalogy* (5 ed.) by T. A. Vaughan, J. M. Ryan, N. J. Czaplewski (Jones and Bartlett, 2011)
- *A Manual of Mammalogy* (3 ed.) by R. E. Martin, R. H. Pine, A. F. DeBlase (Waveland Press, 2001)
- *Peterson Field Guide to Mammals of North America* (4 ed.) by F. A. Reid (Houghton Mifflin Harcourt, 2006)

Evaluation

Quiz 1	9%	Lab 4, Tues Sept 30	Skulls, teeth, skeleton, monotremes, metatherians
Mid-term test	18%	Tues Oct 14, 2 hours, RW 013	Xenarthrans, afrotheres, euarchontans; Lectures 1-5
Quiz 2	9%	Lab 9, Tues Nov 4	Lagomorphs, rodents, eulipotyphlans, chiropterans
Lab Exam	20%	Tues Dec 2, 90 min., RW 013	All mammal groups
Blog	14%	Due Mon Nov 24, 9:00 AM	(explained on pages 3 and 4)
Final Exam	30%	Dec 8-19, 3 hours	All course content (see note below)

Assessment format: Quizzes: one word or one-line responses. Mid-term Test: short-answer (e.g., several sentences or a paragraph). Lab Exam: identification of specimens and adaptations. Final Exam: short-answer and essay-style responses. **Final Exam content:** all course material, but with greater emphasis on carnivorans, pholidotes, ungulates, cetaceans, and Lectures 6-12.

Course site on Portal (portal.utoronto.ca): contains copy of this course syllabus, announcements, slides, blogs, and marks. It is recommended that you check announcements often. The Portal may be used to send email to the entire class; this is sent to your U of T email account.

Office hours: Prof. Goldman's office hours are flexible. Drop by (ES 3045C) or email to set up an appointment. Please state "EEB388" in the subject line of emails and include your full name. Please read the course announcement "My philosophy of teaching and learning" that is posted on Portal.

Lab and Lecture Schedule*

Wk	Date	LABS – TUESDAYS (chapter # in manual)		LECTURES – THURSDAYS (proposed topics)	
1	Sept 8-12	1	Introduction (1), characteristics (3) and diversity of mammals	1	Classification, phylogeny (2); biogeographic regions (8); skulls, teeth, skeleton
2	Sept 15-19	2	Skulls (4), teeth (5), skeleton (6)	2	Reproduction; Monotremata, Metatheria
3	Sept 22-26	3	Monotremata (11) Metatheria (12)	3	Biogeography, myrmecophagy; Xenarthra, Afrotheria
4	Sept 29- Oct 3	4	Quiz 1 + Xenarthra (13), Afrotheria (14)	4	Arboreal adaptations, gliding, Madagascar primates; Euarchonta
5	Oct 6-10	5	Euarchonta (15)	5	Guest lecture at Royal Ontario Museum
6	Oct 13-17	-	Mid-term Test 2:10-4:10, location: RW 013	6	Locomotor adaptations (7), water conservation; Lagomorpha, Rodentia
7	Oct 20-24	6	Lagomorpha (16) Rodentia (17)	7	Insectivory, fossoriality, echolocation, flight; Eulipotyphla, Chiroptera
8	Oct 27-31	7	Eulipotyphla (18) Chiroptera (19)	8	Adaptations to cold, carnivory, semi-aquatic locomotion; Carnivora, Pholidota
9	Nov 3-7	8	Quiz 2 + Carnivora (20), Pholidota (21)	9	Guest lecture at Royal Ontario Museum
10	Nov 10-14	-	No lab (Nov. Break)	10	Adaptations to heat, ungulates, life in water; Perissodactyla, Cetartiodactyla
11	Nov 17-21	9	Perissodactyla (22) Cetartiodactyla (23)	11	Conservation of mammals
12	Nov 24-28	Blog assignment due Mon Nov 24, 9:00 AM			
		10	Review of lab material	12	TBA
13	Dec 1-5	11	Lab Exam: Tues Dec 2 in RW 013 (90 minutes)	(Last regular day of classes is Tues Dec 2)	
	Dec 8-19	Final Exam (3 hours) during Exam Period			

* This lab, lecture and assessment schedule could change; changes will be announced in advance (on Portal).

Blog Assignment

- A blog is a journal where others can comment on what you post.
- Each student will author one blog within the course's Portal site.
- Your blog will be available for other students in the course to view and comment on. (It will not be available to anyone outside of the course.)
- You can blog about any topic/issue that is related to the material covered in the course, such as a reflection on what you have learned, a topic in the news, or on a topic that inspires you to want to learn more and to share what you've discovered with your classmates.
- Characteristics of an effective blog are described on the next page (e.g., include images, videos, links; must cite the sources of ideas, images, etc.; no more than 750 words in length).
- Each student is also required to provide four **constructive comments** on the blog entries of other students.
- At the bottom of your blog entry provide a brief "**about the author**" (e.g., program you are studying, your interest in taking this course, personal interests, etc.); adding a photo of yourself is highly desirable, but optional.
- A rubric explaining how your blog will be graded is provided on the next page.
- In general, *a good blog entry is an expression of your ideas written using your own words, contains resources (e.g., links, images, videos), cites the sources of ideas, images, etc., shows creativity and originality, and elicits constructive comments from others.*
- Note that you can edit or delete a blog entry (before the due date), and save it as a draft and only post when you are satisfied that it is complete.
- Before posting your blog on Portal you will **submit your blog text to Turnitin.com**; do not include your Works Cited section in your Turnitin submission.
- Mandatory U of T statement about use of Turnitin.com: "Normally, students will be required to submit their course essays to Turnitin.com for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the Turnitin.com reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com web site." You can choose not to submit your blog text; contact Prof. Goldman to make alternate arrangements.

Missed course work: If you miss a lab quiz, the mid-term test, or the lab exam due to illness contact Prof. Goldman **within one week** of the missed course work; valid documentation is required in order to be considered to write a make-up. Valid documentation consists of one of the following: U of T Medical Certificate (available online), U of T Health Service Form, or letter from your College Registrar. If you miss the Final Exam you must contact your college registrar and initiate a petition to write a deferred exam. If your petition is granted, the Final Exam is typically written during the next Faculty Examination Period.

Re-marking course work: You have only **one week** after the return of any course work to request a re-mark (excluding the Final Exam).

Accessibility: U of T is committed to accessibility. If you require accommodations for a disability, or have any accessibility concerns about the course, the classroom or course materials, contact Accessibility Services as soon as possible: disability.services@utoronto.ca, or studentlife.utoronto.ca/accessibility.

Academic integrity: EEB388H1F has a zero tolerance policy for plagiarism. If you are caught plagiarizing the work of others in any of your course work, you will receive a grade of zero for the course work and the Office of Student Academic Integrity will be notified. For important information about academic integrity see the OSAI website: www.artsci.utoronto.ca/osai/students.

Grading Rubric for Blog Assignment

Characteristic of an effective blog entry

Each entry:

1. is posted by the due date (Mon Nov 24, 9:00 AM);
2. is an expression of your ideas and written using your own words; and has been submitted to Turnitin.com (on or before the due date);
3. is composed paying attention to the quality of writing (e.g., appropriate word choice and use, logical and correct sentence structure, absence of spelling and grammatical errors – spell-check your work);
4. has an informative title and is written with the audience being your fellow biology students; uncommon terms are defined; use subtitles to identify obvious sections within your blog, if this is appropriate;
5. is no more than 750 words in length (excluding Works Cited section); a word count is provided at the end of the entry (and before the Works Cited section);
6. contains resources (e.g., links, images, videos; especially images), where appropriate, and explains their relevance to the course/blog content;
7. demonstrates an understanding of the material presented and makes clear connections to course content; each image should have a figure caption;
8. includes complete and correct citations for sources (i.e., cites the sources of ideas, images, etc.) in a section titled Works Cited; the citation style to follow in Works Cited is shown below;
9. shows creativity and originality, and uses more specialized sources than Wikipedia for information;
10. elicits constructive comments from others.

Marks will be allocated as follows: (late penalty is 5% per day)

<i>Points</i>	<i>Quality of entry</i>
9-10	Excellent; entry shows strong evidence of achieving most or all of the defining characteristics
7-8	Good; entry shows evidence of achieving many of the defining characteristics
6	Adequate: entry shows evidence of achieving some of the defining characteristics
1-5	Marginal: entry fails to show most the defining characteristics

Reduction for failing to provide four (4) constructive comments: 20% (e.g., 80% – 20% = 60%)

A constructive comment: (1) adds additional useful information to the topic, and/or (2) provides constructive comments to the author that would improve the blog entry.

Citation style: With the text cite sources by number (e.g., [1]); see example blog posted on Portal. When listing sources in your Works Cited section follow the format of the Name-Year system of the Council of Science Editors (CSE), that you learned in BIO120; except spell out journal names in full (do not abbreviate). Consult the BIO120 Library Guide for examples: guides.library.utoronto.ca/content.php?pid=132659&sid=1153638. Two examples are below (journal, internet).

Helgen KM, Miguel Pinto C, Kays R, Helgen LE, Tsuchiya MTN, Quinn A, Wilson DE, Maldonado JE. 2013. Taxonomic revision of the olingos (Bassaricyon), with description of a new species, the Olinguito. ZooKeys 324: 1-83, doi: 10.3897/zookeys.324.5827

Title of webpage [Internet]. Year of publication. Place of publication: Publisher; [cited “insert date viewed”]. Available from: “provide URL”