

Mammalian Adaptations (Zool 444)

Course Credits: 3

Textbook: none

Instructor Name: Alyssa Semerdjian

Instructor Email: Semerdja@oregonstate.edu

Course Description:

Examination of mammalian adaptations pertaining to different environments and survival strategies. Considers both biotic and abiotic environmental factors that promote differing life histories.

Course Learning Outcomes:

After successfully completing this course students will be able to:

- 1) Describe adaptations that mammals employ in particular environments or situations.
- 2) Compare and contrast the strategies that mammals use overcome environmental conditions.
- 3) Assess the efficacy of the methods, results, and conclusions of scientific literature, and provide critiques of faulty elements in peer reviewed works.
- 4) Conduct research to answer questions regarding mammalian adaptations using primary literature.
- 5) Construct the building blocks of a scientific paper. This includes providing background information, designing methods, formulating and discussing statistical results and providing citations.

Communication:

I will aim to return grades and feedback a week after assignment due dates. If you have questions or comments that might be of interest to others taking the course, please post them in the [course slack channel](#). Check in there occasionally to see if your classmates have asked questions relevant to you! If there is a personal matter you'd like to discuss with me please send an email to the address above, or a private message on slack. I will do my best to respond to all correspondence within 48 hours, though I will not be checking for communications between 5pm and 8am PST.

Office hours: I will hold zoom office hours from 1:00-2:00 PST on Tuesdays and Thursdays. If you cannot attend office hours but would like meet send me an email or a private message through slack so we can discuss times.

Student Evaluation:

<u>ACTIVITY</u>	<u>POINTS AVAILABLE</u>
Primary literature review	60
Hypothesis discussions	15
Peer reviews	12
Mini paper group work	108
Mammalian adaptation assignments	60
Quizzes	45
Poster presentation	50
<u>TOTAL</u>	<u>350</u>

Grade Scale:

A	>=92%	C	72 - 77.9%
A-	90 - 91.9%	C-	70 - 71.9%
B+	88 - 89.9%	D+	68 - 69.9%
B	82 - 87.9%	D	62 - 67.9%
B-	80 - 81.9%	D-	60 - 61.9%
C+	78 - 79.9%	F	<=59%

Course Schedule:

Week	Theme	Due Wednesday 11:59 pst	Due Sunday 11:59 pst
1	Overview of mammalian evolution/ taxonomy		-Introduce yourself in the discussion board -Quiz 1
2	Reproduction / Monotremes, Marsupials, Placental mammals	-Primary literature review 1	-Mini paper 1 hypothesis -Quiz 2
3	Feeding strategies / digestion	-Mini paper 1 intro and methods	-Mini paper 1 results and discussion -Quiz 3
4	Hot environments	-Mini paper 1 peer review	-Mini paper 1 final submission -Mammalian adaptations 1

5	Cold environments	-Primary literature review 2	-Mini paper 2 hypothesis -Mammalian adaptations 2
6	Sensory and echolocation	-Mini paper 2 intro and methods	-Mini paper 2 results and discussion -Mammalian adaptations 3
7	Locomotion	-Mini paper 2 peer review	-Mini paper 2 final submission -Quiz 4
8	Marine mammals / deep divers	-Primary literature review 3	- Mini paper 3 hypothesis -Mammalian adaptations 4
9	Domestication and commensalism	-Mini paper 3 intro and methods	-Mini paper 3 results and discussion -Quiz 5
10	Climate change	-Mini paper 3 peer review	-Mini paper 3 final submission -Submit poster
11	Finals Week	-Poster session	

Course Policies:

Academic honesty: OSU expects students to avoid academic misconduct during this course and all other ([section 4.2 in OSU's code of student conduct](#)). This includes avoiding cheating, plagiarism, falsification of information, assisting others in academic misconduct, tampering with grades, submitting work multiple times, and unauthorized recording and use of recordings.

Netiquette:

During this class students are expected to engage in online discussions. During these discussions students are expected to participate in a civil and earnest manor. This includes being respectful of others, even when opinions differ. Many of the assignments in this course are group work. All group members should strive to participate equally during these assignments. While we appreciate enthusiasm for mammalian adaptations, we ask students step back if they find themselves dominating conversations to give others the chance to give input. Similarly we ask

students that normally prefer to sit back and watch to speak up so that their group members can benefit from their opinions.

Resources:

Technical: This course takes place entirely online. If you experience technical difficulties you can contact the OSU Help Desk through their website ([link here](#)) by phone at (541) 737-3474, or by email (osuhelpdesk@oregonstate.edu). If you have issues with canvas specifically you can click the 'help' link within canvas to contact Canvas Support via chat, phone or email.

Disability services: The materials provided with this course are designed to be accessible. If you need further accommodations contact [Disability Access Services \(DAS\)](#)

Mental health: OSU provides Counselling and Psychological Services for all students, including those working remotely.