

ZOOL 4640—Mammalogy—Fall 2017

Times/Room:	Mon. & Wed. 8:30 to 9:20 a.m. (lectures)	N211
	Mon. 9:30 a.m. to 12:50 p.m. & Wed. 9:30 to 10:30 a.m. (labs)	N211
Instructor:	Dr. Patrick Kelly, Professor of Zoology and ESRP Coordinator	
Office Hrs:	Mon. to Wed. 2:00-3:00 in N277, or by appointment.	
Phone:	209-667-3446	
Email:	pkelly@csustan.edu	

Email is the best way to reach me. I usually respond quickly to simple requests and questions, but please write Zool 4640 in the subject line, and include your full name.

Communication: Please check your email and Blackboard every day. You can set up your Stan State email to forward emails to an address you check more frequently

Initial Class Meeting: Wednesday, August 23rd, 2017 at 8:30 a.m.

Teaching Assistant: Vanessa Martinez vmartinez16@csustan.edu

Course Description—This course covers classification, distribution, ecology, behavior, and form and function as they relate to the life histories of mammals, including their identification in the field and the laboratory.

Prerequisites—BIOL 1050 and BIOL 1150 (or equivalent introductory series) and CHEM 1100 and CHEM 1110 with grades of C- or higher, or consent of instructor.

Textbooks: there are two required textbooks.

Mammalogy: adaptation, diversity, ecology by Feldhamer, Drickamer, Vessey, Merritt, and Krajewski (4th ed., 2015); used mostly in lecture; required; notated as F15 in schedule.

Mammals of California by Jameson and Peeters (revised ed., 2004; used mostly in lab; required; or *Mammals of North America* by Kays and Wilson, 2nd ed., 2009.

Grades: Grades will be assigned on a percentage of the possible points earned, thus A = 90+%, B = 80-89.5 %, C = 70-79.5 %, D = 60-69.5 %, F < 59.5%.

NOTE: There will be no “+” or “-” grades given. Credit/No Credit is not an option.

3 lecture exams: 80 + 80 + 80 =	240 pts
3 lab exams: 50 + 80 + 80 =	210 pts
Lab Quizzes =	80 pts
Final Exam =	90 pts
Presentation with abstract =	40 pts
Participation =	40 pts
TOTAL =	700 pts

Lecture exams will be on material covered in lecture and may also include material specifically referred to in readings. These exams may include any type of question. Types of questions to expect: essay, fill-in-blank, list, definitions, etc. Types of questions that should not be expected: multiple-choice.

Lab exams will be on material from the lab. Questions will be of the objective type.

Lab quizzes on material in the prior lab will occur regularly. There will be at least 10 and they will be 10 pts. each. The top eight quiz grades are added together for a maximum grade of 80 pts. There will be no makeup quizzes.

The **Final Exam** will be comprehensive and include both lecture and laboratory material.

Presentations will be on refereed published scientific papers on mammals. There is a threefold purpose to this presentation requirement: 1) to get students used to presenting material orally (as they probably will have to do in some future job), 2) to have upper-division students participate as active contributors to the material learned, and 3) to increase all students' familiarity with the mammalian fauna and current scientific research.

Each student will do one presentation. Each presentation has two parts: an oral presentation and a written abstract.

Each oral presentation will take 10-12 minutes duration and will use Powerpoint. It should include a short introduction to the study, a thorough explanation of the methods, clear results, and a short conclusion of the major findings.

Each typed abstract is, of course, on the paper being presented. An abstract consists of 1-2 sentences of introduction, 1-2 sentences on methods, and several sentences on major findings. This is generally written as one paragraph, but sometimes as two paragraphs. The lower and upper page limits for this are 3/4 to 1 1/2 pages, double-spaced. Only one copy needs to be turned in directly to your teacher. This is also due on presentation day at the beginning of class. Note that you cannot turn in the abstract which was published with your paper!

No quotes will be allowed in any part of the presentation or associated written tasks! No plagiarism allowed!

Papers for the presentation must come from refereed scientific journals. Only papers published since 2014 will be approved. I recommend the Journal of Mammalogy. Papers from other journals may be allowed. Note: all papers for presentations must be preapproved by your instructor at least one week before the presentation.

Participation points are given for participation in various lab activities and field trips. The Saturday field trips will be 30 points for active participation. Participation in other exercises during lab time will be the other 10 pts.

Extra credit of up to 20 points can be earned by doing some kind of mammal research or conservation related activity. More information will be provided in lab. Any extra credit activity must be preapproved by the instructor.

Field trips are a very important part of this course and three are scheduled. Field trips are important because there is only so much that you can learn from books, lectures, videos, and even specimens in the lab. We do need to get into the field to get up close and personal with living, breathing mammals, and even some extinct ones too. The field trips will make the learning experience more meaningful and the class more memorable. More details will be provided as the trips are finalized.

IMPORTANT NOTES:

1. Exams must be taken as scheduled. Any missed exam will result in a grade of 0 for that exam, unless a written and verifiable excuse (also unavoidable circumstance) is provided.
2. All safety protocols and instructions regarding handling of specimens must be strictly adhered to.

3. Any form of cheating (including plagiarism—see below) will not be tolerated. Incidents of cheating are also reported to the administration.
4. Audio or video recording is not allowed in this course with the exception that still photographs may be taken of the specimens.

Other expectations

1. You are expected to treat everyone in class with respect and kindness. In order to create a thriving learning community, it is important that we encourage one another to do our best.
2. To avoid distracting yourself and others, please do not phone, text, email, social network, surf the web, or do work for other classes when we are working on in-class activities. All electronic devices (phones, tablets, music players, etc.) must be turned off and kept in your bag during class. Class time is not to be used for checking email, texts, Facebook, etc. If you must respond to a voice mail or text (e.g., re. a family matter), please step out of the room, preferably after I am done presenting new material so that you do not distract others.
3. I do not allow the use of laptops for note-taking during my lectures and presentations. This is because there is now more than ample evidence that students who take notes by hand *remember conceptual information better than those who take notes on a computer*¹. So, please get yourself a good notepad or binder for the class. It is very important to take good notes on the materials I will be covering. Come exam time, there is no substitute for good notes.
4. Come to class properly prepared by doing any assigned readings prior to class.
5. Engage the material deeply and critically. Treat your education as if it is helping to prepare you to change the world (which hopefully it is).
6. Attend every class activity², be on time, and participate fully. Absences will be noted.
7. You may be required to work independently on some assignments, but be sure to complete and turn in your work on time.
8. Maintain the highest standards of academic integrity. Your work must be your own. Plagiarism—taking direct quotes or ideas from other sources without attribution—is cheating, and will not be tolerated. Plagiarism and other forms of cheating will result in an automatic F grade in this course. Note that I am good at detecting plagiarism and you should note that I use *Turnitin* to objectively evaluate written submissions. Do not take the risk. If you have questions about what is acceptable, please ask me.
9. Take the initiative to use course and campus resources (my office hours³, web sites, readings, the Writing Center, Library) to get the most out of the course.
10. Please be neat and clean up after yourself.

Your instructor will do the following:

Do his best to provide you with a stimulating, useful, and fun course; treat you with respect; assign grades impartially; be available to help during office hours and via email; do his best to return assignments and post grades in a timely manner.

¹ Holstead, C.E. 2015. The benefits of no-tech note taking. *Chronicle of Higher Ed.* (March 4, 2015)

² Including the field trips.

³ I expect every student in the class to avail of my office hours at least twice during the semester.

ZOOL 4640—Mammalogy—Fall 2017

Wk	D	Date	Time	Tentative Lecture Schedule (F15: Feldhamer et al. ref.)
1				
	W	23 Aug	8:30-9:20	Introduction (F15-1)
2	M	28 Aug	8:30-9:20	History (F15-2)
	W	30 Aug	8:30-9:20	No Lecture; Lab Only—Skeleton (cont.)
3	M	4 Sept		LABOR DAY - HOLIDAY
	W	6 Sept	8:30-10:30	Characteristics (F15-5, 7, 8)—2-hr Lecture—No Lab Today
4	M	11 Sept	8:30-9:20	Characteristics (cont.); Presentation Topics Due
	W	13 Sept	8:30-9:20	Open Lab – No Lecture
5	M	18 Sept	8:30-9:20	Evolution (F15-5)
	W	20 Sept	8:30-9:20	Lecture Exam 1 (80 pts)
6	M	25 Sept	8:30-9:20	Reproduction (F15-11)
	W	27 Sept	8:30-9:20	Reproduction (cont.)
7	M	2 Oct	8:30-9:20	Monotremes (F15-12)
	W	4 Oct	8:30-9:20	Marsupials (F15-12)
8	M	9 Oct	8:30-9:20	Intro. to Eutherians; “Insectivora” et al. (F15-13)
	W	11 Oct		NO CLASS—Non-instructional day
9	M	16 Oct	8:30-9:20	Chiroptera (F15-14); Primates (F15-15)
	W	18 Oct	8:30-9:20	Xenarthra et al. (F15-16)
10	M	23 Oct	8:30-9:20	Carnivora (F15-17)
	W	25 Oct	8:30-9:20	Carnivora (cont.)
11	M	30 Oct	8:30-9:20	Cetacea (F15-21)
	W	1 Nov	8:30-9:20	Lecture Exam 2 (80 pts)
12	M	6 Nov	8:30-9:20	Perissodactyla (F15-20)
	W	8 Nov	8:30-9:20	Artiodactyla (F15-20)
13	M	13 Nov	8:30-9:20	Rodentia (F15-18)
	W	15 Nov	8:30-9:20	Lagomorpha (F15-18)
14	M	20 Nov	8:30-9:20	Proboscidea et al. (F15-19) & Field Trip 3 to UC Berkeley
	W	22 Nov	8:30-9:20	Lecture Exam 3 (80 pts)
15	M	27 Nov	8:30-9:20	Biogeography (F15-6)
	W	29 Nov	8:30-9:20	Metabolism and Thermoregulation (F15-10)
16	M	4 Dec	8:30-9:20	Metabolism and Thermoregulation (cont.)
	W	6 Dec	8:30-9:20	Mammalian Social Organization (F15-22, 23, 24, 25)
17	M	11 Dec	8:30-9:20	Conservation (F15-30)
FW	W	13 Dec	8:30 AM	Final Exam (90 pts)

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Wk	D	Date	Time	Lab & Field Trip Schedule
1				
	W	23 Aug	9:30-10:30	Characteristics
2	M	28 Aug	9:30-12:50	Characteristics (cont.); Skeleton
	W	30 Aug	9:30-10:30	Skeleton (cont.)
3	M	4 Sept		LABOR DAY - HOLIDAY
	W	6 Sept	9:30-10:30	Skulls, Teeth
4	M	11 Sept	9:30-12:50	Skulls, Teeth (cont.)
	W	13 Sept	9:30-10:30	Open Lab; Intro. to Field Trip 1 (Sat. 16 Sept/Fossil Disc. Center)
5	M	18 Sept	11:00	Lab Exam 1 (50 pts)
	W	20 Sept	9:30-10:30	No Lab (after lecture exam)
6	M	25 Sept	9:30-12:50	Monotremes
	W	27 Sept	9:30-10:30	Marsupials
7	M	2 Oct	9:30-12:50	"Insectivora" et al. FDC Sp. Account due
	W	4 Oct	9:30-10:30	"Insectivora" et al. (cont.)
8	M	9 Oct	9:30-12:50	Chiroptera
	W	11 Oct		NO CLASS—Field Trip 2 (Sat. 14 Oct/San Joaquin River NWR)
9	M	16 Oct	9:30-12:50	Primates
	W	18 Oct	9:30-10:30	Xenarthra et al.
10	M	23 Oct	9:30-12:50	Carnivora
	W	25 Oct	9:30-10:30	Open Lab
11	M	30 Oct	9:30-12:50	Lab Exam 2 (80 pts)
	W	1 Nov	9:30-10:30	Cetacea
12	M	6 Nov	9:30-12:50	Perissodactyla
	W	8 Nov	9:30-10:30	Artiodactyla
13	M	13 Nov	9:30-12:50	Rodentia
	W	15 Nov	9:30-10:30	Rodentia, Lagomorpha, Proboscidea et al.
14	M	20 Nov	9:30-12:50	Field Trip 3 to UC Berkeley
	W	22 Nov	9:30-10:30	Exercise
15	M	27 Nov	9:30-12:50	Exercise
	W	29 Nov	9:30-10:30	Open lab
16	M	4 Dec	9:30-12:50	Lab Exam 3 (80 pts)
	W	6 Dec	9:30-10:30	Exercise
17	M	11 Dec	8:30-9:20	Exercise