

BIO 359K- Principles of Animal Behavior  
TTh 12:30-2:00  
BUR 212

Instructor: Dr. Blinda E. McClelland (mcclelland@mail.utexas.edu)

Office Hours: TTh 10:30-12:00 noon; MWF 8:00-8:45

Office: PAI 1.48A

Required Reading:

1. Textbook: *Animal Behavior*, 5<sup>th</sup> edition (Drickamer, Vessey, Jakob). McGraw-Hill Publishing & Co. (ISBN: 0-07-012199-0).
2. There will be articles from the primary literature, as well as pdfs, hand-outs or weblinks from other appropriate sources such as "American Scientist", popular press and academic websites. There is a lot of reading in this course, but I hope you will find it interesting and enlightening!

**OFFICIAL UNIVERSITY OF TEXAS COURSE DESCRIPTION: Principles of Animal Behavior.** An introduction to the study of animal behavior: descriptive analysis of behavior; physiological basis of behavior; development of behavior; adaptive significance and evolution of behavior; communication and social behavior. Three lecture hours and one discussion hour a week for one semester.

Prerequisite: Biology 325 or 325H with a grade of at least *C*.

Dr. McClelland's COURSE DESCRIPTION: EVERYBODY likes animal behavior! (At least, we all like watching shows on the Animal Planet.) Not everyone realizes, though, that animal behavior is the result of evolutionary principles, particularly natural and sexual selection acting on the anatomy and physiology of an animal's body and brain. The study of animal behavior by humans has also evolved from simple beginnings at the dawn of human civilization until today's rigorous examination of behavior in the context of neuroscience and ecology. This course is designed to put you in the academic shoes of the researchers behind the "animal planet" shows, as well as challenge you to begin thinking of the interactions among genetics, endocrinology, motivation, metabolism, life history, learning, neurobiology, sensory physiology, and other elements that clearly contribute to the way an animal acts. Animal behavior is fun; it is also a rigorous science, please be prepared to study. It is especially important that you don't fall behind the readings for this course and that you attend each and every lecture and discussion section.

**EXAMS:** There will be 3 “in-class” and 1 optional final exams which are a combination of multiple choice, short answer, essay, matching (etc) with increasing numbers of questions and point values on each exam. The in-class exams will be worth 75, 100 and 125 points increasing sequentially and the final will be worth 150 points. Every exam is comprehensive; in other words, the 2<sup>nd</sup> and 3<sup>rd</sup> exams will cover recently presented material as well as material from the beginning of the course in a proportional manner. Please double check the final exam schedule when it becomes available. Finals will be taken in the classroom.

**NO MAKEUP EXAMS WILL BE GIVEN!!!** If you cannot take an in-class exam regardless of reason, you will be required to take the final.

The plus and minus grading system will be used in this course. Percentage categories for final letter grades which include exams as well as discussion points and the semester group research project is according to UT policy. (There is a really good website from the University of Kansas explaining the derivation of the percentages, etc., so if you have questions please check this out: [http://web.ku.edu/~utile/plus-minus\\_grading.pdf](http://web.ku.edu/~utile/plus-minus_grading.pdf))

Grade	Percent	Points on transcript
A	93.50 and above	4.0
A-	90.00–93.49	3.67
B+	86.50–89.99	3.33
B	83.50–86.49	3.0
B-	80.00–83.49	2.67
C+	76.50–79.99	2.33
C	73.50–76.49	2.0
C-	70.00–73.49	1.67
D+	66.50–69.99	1.33
D	63.50–66.49	1.0
D-	60.00–63.49	0.67
F	59.99 and below	0.0

If you score within the point categories, you are guaranteed the letter grade and modifier indicated. I have been known to adjust the grade categories to reflect the overall performance of the class, but this is not a guarantee. **DO NOT COUNT ON A CURVE RAISING YOUR SCORE AND DO NOT ASK.** (I will be keeping track of students who ask about a curve and there will be negative consequences!) You will have many opportunities to assess your progress in the course, and if you need help understanding the material in order to achieve the grade you want, ask immediately.

You are responsible for calculating your own grade and progress. Any perceived grading discrepancy must be appealed **in writing** by the end of the next class period after the tests are returned. No appeal will be considered after that.

**ACADEMIC HONESTY:** I expect students to behave with integrity. Students found cheating on exams, (which includes discussing the exams outside of class) plagiarizing or any other violation will receive a score of 0 on that assignment and will have the incident reported to the Dean of Students' office.

**STUDENTS WITH DISABILITIES:** You may request appropriate academic accommodations from the Division of Diversity and Community Engagement. Services for Students with Disabilities, 471-6259. [Http://www.utexas.edu/diversity/ddcc/ssd/](http://www.utexas.edu/diversity/ddcc/ssd/)

**RELIGIOUS HOLIDAYS:** By UT Austin policy, you must notify me of your pending absence at least fourteen days prior to the date of observance of a religious holy day. If you must miss a class, an examination, a work assignment, or a project in order to observe a religious holy day, you will be given an opportunity to complete the missed work within a reasonable time after the absence.

**INFORMATION REGARDING EMERGENCY EVACUATION ROUTES AND EMERGENCY PROCEDURES:** Information regarding emergency evacuation routes and emergency procedures can be found at <http://www.utexas.edu/emergency>. Occupants of buildings on The University of Texas at Austin campus are required to evacuate buildings when a fire alarm is activated. Alarm activation or announcement requires exiting and assembling outside. Familiarize yourself with all exit doors of each classroom and building you may occupy. Remember that the nearest exit door may not be the one you used when entering the building. Students requiring assistance in evacuation shall inform their instructor in writing during the first week of class. In the event of an evacuation, follow the instruction of faculty or class instructors. Do not re-enter a building unless given instructions by the following: Austin Fire Department, The University of Texas at Austin Police Department, or Fire Prevention Services office.

**BEHAVIORAL CONCERNs:** The Behavior Concerns Advice Line (BCAL) is 232-5050

**BLACKBOARD:** I will make use of "Blackboard" and email. Disable any spam blockers that would prevent an email from me or the TAs reaching you. Please become familiar with Blackboard (put it on your "favorites" URL list) and be sure to check it regularly for announcements, assignments, etc.

**DISCUSSION GROUPS:** This is a required part of the course.

Unique number	Discussion Time	Discussion Place
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50405	Friday 8:00-9:00	PAR 206
50410	Friday 9:00-10:00	PAR 304
50415	Friday 11:00-12:00	CPE 2.206
50420	Friday 12:00-1:00	ECJ 1.204

The weekly discussion sections are a required part of the course and worth 50 points total, or 10% of your grade. The discussions are your opportunity to meet in smaller groups to review and variously discuss the topics mentioned during lecture, practice animal observation, and discuss the primary research articles assigned each week. Ms. Guerra is the discussion leader in these groups and is available to answer questions concerning lecture topics and readings. You can expect simple but required assignments to accomplish each week. Attendance will be taken at the end of the discussion sections.

There will be reading assignments each week which should be read prior to the discussion section. Readings will be in pdf format on Blackboard.

One of the goals in this class is to have students recognize the differences between primary literature, “secondary literature” (the readings from American Scientist) and textbooks. Thus you will be exposed to all 3 types of scientific literature in this course.

If necessary during the discussion session, the TAs can help you construct study outlines containing relevant (testable) concepts and important vocabulary words. The discussion sections prior to the week of an exam will be your chance to review the material. No other reviews will be scheduled for either the in-class or final exams. Any issues associated with the final independent research project will be brought up and discussed during the discussion section.

**GRADING IN DISCUSSION SECTION:** There are point values associated with the discussion groups. Ms. Guerra is solely responsible for the assignments and grading in the discussion section and has therefore prepared a separate syllabus outlining her expectations for you in this part of the course.

**GROUP RESEARCH PROJECT (GRP):** You will be required to do animal observations of at least 3 hours and report your findings in a scientific format. A great deal of the time in discussions will be focused on the accomplishment of this research project. There will be due dates throughout the semester for the various parts of the GRP so that no one will be rushed or overwhelmed at the end of the semester. The GRP assignments and final grade for the discussion and research projects are at the discretion of the TAs.

You should start thinking of which animals would be convenient and/or fun to observe (not your pet, something wild) and which behaviors are of interest to you. This research project will be worth 125 points or 25% of your final grade. There will be due dates during the semester for written parts of this assignment (with associated point values), leading up to the final due dates before the last class day. Again, more information will be forthcoming when you meet in discussion section for the first time.

#### **REVIEW:**

Exam 1: 2/17, 75 points, 100% new material

Exam 2: 3/31, 100 points, 90% new material, 10% old material

Exam 3: 5/5, 125 points, 80% new material, 20% old material

Final Exam: 5/14, 150 points, 100% old material, evenly divided

Discussion Participation: 50 points

Group Research Project: 150 points

Although I do not take attendance at the lectures, you are expected to be on time and attend every lecture. There will be videos shown at intervals throughout the semester during class; they will not be repeated, but the material in the videos will be included on the exams.

**ADVICE FOR DOING WELL:** You are upper division biology students so I'm not going to instruct you in how to succeed at the University of Texas. You should already be well aware of the need to come to class ON TIME, study outside of class, complete the readings BEFORE class, etc., etc. It is easy to think of animal behavior as "fun" and therefore "easy". This is not necessarily true. Other reminders include: NO CELL PHONES, do not come early or leave late, do not talk in class, do not read the newspaper, please pay attention, get help immediately if needed.

**BIO 359K - Schedule of lectures and exams (will be altered as needed).**

Date	Lecture topics	Chapter (Drickamer)
1/18	Introduction	1
1/20	History	2
1/25, 1/27	Methods	3
2/1, 2/3	Genes/Evolution	4
2/8, 2/10	Behavioral Genetics	5
2/15	Evolution/Behavior	6
<b>2/17</b>	<b>In-class Exam worth 75 points</b>	
2/22, 2/24	Nervous System	7
3/1	Hormones	8
3/3	Biological Rhythms	9
3/8	Development	10
3/10, 3/22	Learning	11
3/24	Communication	12
3/29	Migration etc.	13
<b>3/31</b>	<b>In-class Exam worth 100 points</b>	
4/5	Habitat	14
4/7, 4/12	Foraging	15
4/14	Conflict	16
4/19, 4/21	Sex/Repro/Parents	17
4/26	Mating Systems	18
4/28, 5/3	Social Behavior	19
<b>5/5</b>	<b>In-class Exam worth 125 points</b>	

**5/14 (2-5 pm) Comprehensive Final Exam 150 POINTS**

**NO, you may NOT take an exam at a different time, please don't ask!**