BIOL 4411 ANIMAL BEHAVIOR SYLLABUS, SPRING 2013
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OVERVIEW: Animal Behavior is an upper-division, lecture/laboratory course designed for students in biology and related scientific disciplines. A main emphasis of the course is examining the behavior of invertebrate and vertebrate animals in an evolutionary context, viewing changes in behavior as adaptations to the organism’s environment. Students also explore other methods of investigating animal behavior (e.g., those rooted in the social sciences).

STUDENT LEARNING OUTCOMES: Upon completion of this course, students will be able to:

- Explain how different approaches used for investigation (e.g., evolutionary, physiological, psychological) offer different, unique and complementary perspectives about behavior.
- Describe the physiological basis of behavior—especially the advantages and disadvantages of different modes of sensory reception and perception in animal orientation and communication.
- Discuss the evolution of behavior (of individuals and groups) as an adaptation to environmental pressures (natural selection).
- Apply the basic principles of animal behavior to studying the development of complex behavior (e.g., human behavior).


LECTURES: Lecture topics present broad concepts covered by the course instructor, guest speakers and/or student presenters. Students should consult the textbook as a primary reference to help them understand these topics.

LABORATORIES: Laboratory periods allow for direct observation, experimentation, and/or demonstrations of behavioral phenomena.

COURSE GRADE: The final course mark will be computed as an average of:

<table>
<thead>
<tr>
<th>Component</th>
<th>Marks</th>
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<tr>
<td>Three lecture examinations</td>
<td>300</td>
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<tr>
<td>Presentations</td>
<td>100</td>
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<tr>
<td>Project</td>
<td>100</td>
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<tr>
<td><strong>Total Marks Possible</strong></td>
<td><strong>500</strong></td>
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<60 = F; 60-69 = D; 70-79 = C; 80-89 = B, >90 = A

EXAMINATIONS: Lectures and laboratories are interdependent, complementary approaches towards understanding the same principles. Subject material from lectures and laboratories will appear together on any examination.
PRESENTATIONS: Each student will be assigned a topic on an aspect of behavior (sleep, interspecific communication, animal culture, or tool use, as examples) which will be presented orally to the class. Format, references, communication skills, and answering questions from the class will be used in evaluation.

PROJECT: A written field or laboratory project on a behavioral topic of interest to the student will require study outside of regular class times. Students will be responsible for experimental design, collecting data, performing a literature search, and analyzing and presenting the results in a typewritten paper.

ADDITIONAL INFORMATION

Disability and Veterans’ Services: Texas A&M University-Corpus Christi is committed to providing persons with disabilities an equal opportunity to access campus facilities, resources and programs. The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. Support and accommodations are also available for returning veterans who experience cognitive and/or physical access issues in the classroom or on campus. Our Office of Disability Services arranges such support and academic accommodations. To make a request, or for more information, call (361) 825-5816 or visit Driftwood 101. It is important to contact the Office of Disability Services in a timely fashion as it will take time for them to review requests and prepare accommodations and accommodation letters.

Grade Appeals: As stated in the Texas A&M University-Corpus Christi University Rules and Procedures (Section B [Academic Program], Part 13 [Students]: 13.02.99.C2 [Student Grade Appeals] and 13.02.99C2.01 [Student Grade Appeal Procedures]), a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is on the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, consult the University Rules and Procedures specified above (accessible through the University Rules and Procedures website at http://www.tamucc.edu/provost/university_rules/index.html). For assistance and/or guidance in the grade appeal process, students may contact the Office of Student Affairs.

Office Hours are Monday, Weds and Fri 8-9, 10-11.
This timetable may be modified due to unforeseen events, opportunities for field trips, and student interest in various topics. It is the responsibility of the student to be aware of changes in the schedule announced in class. Some of the field trips may be on weekends due to time constraints; departure and return times will be announced in lectures.

Lectures and laboratories are interdependent, complementary approaches towards understanding the same principles. Subject material from lectures and laboratories may appear together on any examination.

**JAN.**

**Lab 1:**
Introduction: Info Sheets, Syllabus, References  
Geologic Time; Systematics  
No Lab

**MLK HOLIDAY**
Definitions and Paradigms  
Instinct and Learning

**Lab 2:**
Lab Orient., Proc., Field Notebooks, Data Sheets  
Sensory Modes: Vision  
Vision Filmstrip  
Vision Discussion  
Vision Experiments

**FEB.**

**Lab 4:**
Audition Soundtrack  
Audition Discussion  
Audition Experiments  
Sensory Modes: Olfaction  
Sensory Modes: Tactile and Others  
Sensory Mode Conclusions  
Olfaction, Tactile, and Other Sensory Modes

**LABORATORY EXAM I (INTRO. -> SENSORY MODES)**
Exam post mortum, discussion  
Sociobiology  
Lab Orient., Proc., Field Notebooks, Data Sheets  
Living in Groups, Courtship, Fighting  
Sociobiology Continued  
Fossil Behavior  
Fossil Behavior  
Setting Up Experiment: Taxes, Tropisms, Orientation

**MAR.**

**Lab 7:**
Behavioral Ecology  
Human Ethology  
Human Ethology  
Field Project
MIDTERM LAB EXAM
Guest Speaker
Guest Speaker
Field Project

Lab 9

SPRING BREAK
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No Lab
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Field Project

EXAM II (SOCIOBIOLOGY -> SPEAKERS)
Exam post mortum, discussion
Field Project

Lab 10:
Presentations
Presentations
Presentations

Lab 11: FIELD TRIP
Presentations
Presentations
Presentations; Good Friday

Lab 12: Project Report-backs

APR.
Presentations
Presentations

Lab 13: Project Report-Backs
Presentations
Presentations

Lab 14: FINAL LAB EXAM
Presentations

Lab 15: Last day to return equipment
Presentations
Presentations

LECT. EXAM III (PRESENTATIONS)

FINALS MEETING: TBD