Animal Behavior BIOL 4411
Department of Life Sciences
Summer I 2015

A. COURSE INFORMATION

Course number/section: BIOL 4411.001, Lab 4411.101
Class meeting time: MTWR 2-3:55 PM, Lab F: 8:00 AM - 2:00 PM
Class location: Lecture: CS 115, Lab: CI 206
Course Website:

B. INSTRUCTOR INFORMATION

Instructor: Dr. Katherine Miller
Office location: TBA
Office hours: TBA
Telephone: e-mail: kmiller1@tamucc.edu
Appointments: During office hours (TBA) and other times by appointment

C. COURSE DESCRIPTION

Catalog Course Description
An understanding of why animals behave in the manner they do, through examination of both invertebrate and vertebrate species. Safety training given during a laboratory meeting early in the semester is required for continued participation in this course

Extended Course Description

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).

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

D. PREREQUISITES AND COREQUISITES

Prerequisites
Prerequisite: BIOL 1407.

Corequisites
Students must be enrolled in both 4411.001 (lecture) AND 4411.101 (lab)
E. **REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES**

**Required Textbook(s)**  

**Optional Textbook(s) or Other References**  
N/A

**Supplies**  
Field notebook, lab coat required for lab

F. **STUDENT LEARNING OUTCOMES AND ASSESSMENT**

Assessment is a process used by instructors to help improve learning. Assessment is essential for effective learning because it provides feedback to both students and instructors. A critical step in this process is making clear the course’s student learning outcomes that describe what students are expected to learn to be successful in the course. The student learning outcomes for this course are listed below. By collecting data and sharing it with students on how well they are accomplishing these learning outcomes students can more efficiently and effectively focus their learning efforts. This information can also help instructors identify challenging areas for students and adjust their teaching approach to facilitate learning.

By the end of this course, students should be able to:

1. Explain how different approaches used for investigation (e.g., evolutionary, physiological, psychological) offer different, unique and complementary perspectives about behavior.

2. Describe the physiological basis of behavior—especially the advantages and disadvantages of different modes of sensory reception and perception in animal orientation and communication.

3. Discuss the evolution of behavior (of individuals and groups) as an adaptation to environmental pressures (natural selection).

4. Apply the basic principles of animal behavior to studying the development of complex behavior (e.g., human behavior).

5. Comprehend and apply different approaches to studying animal behavior in the field and/or laboratory, and be able to create and understand ethograms, transition diagrams, and time budgets, among other tools.

G. **INSTRUCTIONAL METHODS AND ACTIVITIES**

Students will learn through instructor-led lectures of the text material, literature research and presentation on a topic of behavior, and observation of animals in the field, including a field trip.
H. MAJOR COURSE REQUIREMENTS AND GRADING

Exams are designed to evaluate your comprehension of lecture material, the textbook, and reading supplements. Laboratory exercises are designed to complement the material in lecture. The final exam will be comprehensive in that it will address concepts discussed throughout the semester. Each student will be assigned a topic on an aspect of behavior (sleep, interspecific communication, animal culture, tool use, etc.) which will be presented orally to the class. Evaluation of the presentation will include content and references, format, communication skills, and answering questions from the class and/or instructor.

<table>
<thead>
<tr>
<th>Element</th>
<th>Value</th>
<th>Student assessment</th>
<th>Grade scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture exam (3)</td>
<td>100 (300 total)</td>
<td>1-4</td>
<td>A ≥ 90%</td>
</tr>
<tr>
<td>Assigned readings, etc.</td>
<td>50</td>
<td>1-4</td>
<td>B = 80-89%</td>
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<tr>
<td>Presentation</td>
<td>100</td>
<td>1-4</td>
<td>C = 70-79%</td>
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<tr>
<td>Lab exam</td>
<td>100</td>
<td>5</td>
<td>D = 60-69%</td>
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<tr>
<td>Lab and field exercises</td>
<td>100</td>
<td>5</td>
<td>F &lt; 60%</td>
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<tr>
<td>Field trip</td>
<td>50</td>
<td>5</td>
<td></td>
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<tr>
<td>Total</td>
<td>700</td>
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</table>

I reserve the right to alter grading elements with supplemental assignments, etc.

I. COURSE CONTENT/SCHEDULE

<table>
<thead>
<tr>
<th>Date</th>
<th>Lecture</th>
<th>Lab</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Jun 1&lt;sup&gt;st&lt;/sup&gt;</td>
<td>Introduction, Chapter 1</td>
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<tr>
<td>2</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>Ch. 1, Chapter 2: Altruism</td>
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<tr>
<td>3</td>
<td>3&lt;sup&gt;rd&lt;/sup&gt;</td>
<td>Chapter 3: Social Behavior</td>
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<tr>
<td>4</td>
<td>4&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Ch. 3 (con.), Chapter 4: Communication</td>
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<tr>
<td>5</td>
<td>5&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Studying behavior, field, presentations</td>
</tr>
<tr>
<td>6</td>
<td>8&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Chapter 5: Avoiding predators</td>
</tr>
<tr>
<td>7</td>
<td>9&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Chapter 5: Finding food</td>
</tr>
<tr>
<td>8</td>
<td>10&lt;sup&gt;th&lt;/sup&gt;</td>
<td>EXAM I</td>
</tr>
<tr>
<td>9</td>
<td>11&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Chapter 6: Habitat Selection, migration</td>
</tr>
<tr>
<td>10</td>
<td>12&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Ethograms, focal sampling, time budgets</td>
</tr>
<tr>
<td>11</td>
<td>15&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Chapter 7 - 8: Reproductive Behavior</td>
</tr>
<tr>
<td>12</td>
<td>16&lt;sup&gt;th&lt;/sup&gt;</td>
<td>and mating systems</td>
</tr>
<tr>
<td>13</td>
<td>17&lt;sup&gt;th&lt;/sup&gt;</td>
<td>EXAM II</td>
</tr>
<tr>
<td>14</td>
<td>18&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Chapter 9: Parental Care</td>
</tr>
<tr>
<td>15</td>
<td>19&lt;sup&gt;th&lt;/sup&gt;</td>
<td>JWatcher, transition diagram, Sound lab</td>
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<tr>
<td>16</td>
<td>22&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>Chapter 10: Causes of behavior</td>
</tr>
<tr>
<td>17</td>
<td>23&lt;sup&gt;rd&lt;/sup&gt;</td>
<td>Chapter 11 - 12: Development of</td>
</tr>
<tr>
<td>18</td>
<td>24&lt;sup&gt;th&lt;/sup&gt;</td>
<td>behavior, nervous systems</td>
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<tr>
<td>19</td>
<td>25&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Chapter 14: Human behavior</td>
</tr>
<tr>
<td>20</td>
<td>26&lt;sup&gt;th&lt;/sup&gt;</td>
<td>LAB EXAM</td>
</tr>
<tr>
<td>21</td>
<td>29&lt;sup&gt;th&lt;/sup&gt;</td>
<td>NO CLASS</td>
</tr>
<tr>
<td>22</td>
<td>30&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Presentations</td>
</tr>
<tr>
<td>23</td>
<td>1&lt;sup&gt;st&lt;/sup&gt;</td>
<td>Presentations</td>
</tr>
<tr>
<td>24</td>
<td>Jul. 2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>FINAL</td>
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Please note, this is a tentative schedule: I reserve the right to change the schedule at any time!
Note: Changes in this course schedule may be necessary and will be announced to the class by the Instructor. The assignments and exams shown are directly related to the Student Learning Outcomes described in Section F.

J. COURSE POLICIES

Attendance/Tardiness
Attendance is critical to comprehending the material and passing the course. Students need to be on time for lecture and lab. Tardiness will be permitted, but also noticed by the instructor. Be on time.

Late Work and Make-up Exams
Generally, I will not accept late work, nor allow students to make-up exams. If the student knows they will be unable to take an exam at the assigned date and time, it is their responsibility to notify the instructor immediately.

Extra Credit
Extra credit is not provided: students must do well on all their assignments without the assumption that the grades will be curved or extra credit assignments provided.

Cell Phone Use
Please turn off your cell phones (or iPods, laptops, etc.), or turn them to silent, and put them away, before class begins. Use of cellphones and laptops in lecture and lab is disrespectful to your instructor and your fellow classmates.

Laptop Use
Laptops may be permitted for particular activities as deemed appropriate by the instructor.

Food in Class
Food is not permitted in the lab, nor is it acceptable in the lecture room.

Missed Exam
See above

Participation
Active participation in group discussions in lecture and activities in the field and lab is required.

K. COLLEGE AND UNIVERSITY POLICIES

- Academic Integrity (University)
  University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is
subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in a failing grade.

- **Classroom/Professional Behavior**
  Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc.

- **Statement of Civility**
  Texas A&M University-Corpus Christi has a diverse student population that represents the population of the state. Our goal is to provide you with a high quality educational experience that is free from repression. You are responsible for following the rules of the University, city, state and federal government. We expect that you will behave in a manner that is dignified, respectful and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation or disability. Behaviors that infringe on the rights of another individual will not be tolerated.

- **Deadline for Dropping a Course with a Grade of W (University)**
  The grade of W will be assigned to any student officially dropping a course. Please consult with the instructor before you decide to drop to be sure it is the best thing to do. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. Should dropping the course be the best course of action, visit the Office of the University Registrar for the Course Drop Form that must submitted. No student is eligible to receive a W without completing the official drop process by this deadline. Please consult the Academic Calendar (http://www.tamucc.edu/academics/calendar/) for the last day to drop a course.

- **Grade Appeals (College of Science and Engineering)**
  As stated in University Procedure 13.02.99.C2.01, 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 upon 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, see University Procedure
13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at http://www.tamucc.edu/provost/university_rules/index.html, and the College of Science and Engineering Grade Appeals webpage at http://sci.tamucc.edu/students/GradeAppeal.html. For assistance and/or guidance in the grade appeal process, students may contact the chair or director of the appropriate department or school, the Office of the College of Science and Engineering Dean, or the Office of the Provost.

- **Disability Services**
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. If you believe you have a disability requiring an accommodation, please call (361) 825-5816 or visit Disability Services in Corpus Christi Hall 116.

If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.

http://disabilityservices.tamucc.edu/

- **Statement of Academic Continuity**
In the event of an unforeseen adverse event, such as a major hurricane and classes could not be held on the campus of Texas A&M University–Corpus Christi; this course would continue through the use of Blackboard and/or email. In addition, the syllabus and class activities may be modified to allow continuation of the course. Ideally, University facilities (i.e., emails, web sites, and Blackboard) will be operational within two days of the closing of the physical campus. However, students need to make certain that the course instructor has a primary and a secondary means of contacting each student.

L. **OTHER INFORMATION**

- **Academic Advising**
The College of Science & Engineering requires that students meet with an Academic Advisor as soon as they are ready to declare a major. The Academic Advisor will set up a degree plan, which must be signed by the student, a faculty mentor, and the department chair. Meetings are by appointment only; advisors do not take walk-ins. Please call or stop by the Advising Center to check availability and schedule an appointment. The College’s Academic Advising Center is located in Center for Instruction 350 or can be reached at (361) 825-3928.
GENERAL DISCLAIMER
I reserve the right to modify the information, schedule, assignments, deadlines, and course policies in this syllabus if and when necessary. I will announce such changes in a timely manner during regularly scheduled lecture periods.