A. COURSE INFORMATION

Course number/section: BIOL 5411.001; BIOL 5411.101 (lab)
Class meeting time: Lecture – 8-9:15 TR; Lab – 2-4:50 W
Class location: Lecture – OCNR 131; Lab – ECMS 114
Course website: Blackboard

B. INSTRUCTOR INFORMATION

Instructor: Kim Withers
Office location: NRC 3205
Office Hours: 10-12 MW, TR 9:30-11 (prefer via phone or WebEx or similar)
Telephone: 825-5907
Email: Kim.Withers@tamucc.edu
Appointments: Call to set up an appointment outside of office hours

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. SMTE 0091 is a co-requisite for this course. Documented completion of this safety training is required early in the semester for continued participation in this course. Safety training given during a laboratory meeting early in the semester is required for continued participation in the course.

Extended Course Description
In this course we will explore the proximate and ultimate causes of behavior, with a strong focus on experiential learning via case studies, discussion, and experimentation.

D. PREREQUISITES AND CO-REQUISITES

Prerequisites
None

Corequisite
SMTE 0091 Biological Laboratory Safety Seminar

E. REQUIRED TEXTBOOKS, READINGS, & SUPPLIES

Required Textbooks
The second edition of the same book is an acceptable substitute.

Other Required References
Additional readings from the primary literature and other sources will be assigned throughout the semester.

Required Supplies
F. STUDENT LEARNING OUTCOMES AND ASSESSMENT

By the end of this course, students should:

1. UNDERSTAND the proximate and ultimate causes of animal behavior
2. BE ABLE TO define behaviors and interpret behavioral data
3. PROPOSE a hypothesis-driven behavioral study that includes the appropriate animal use and care protocols
4. DEMONSTRATE competence in collecting, analyzing, and communicating behavioral data

G. INSTRUCTIONAL METHODS & ACTIVITIES

Lecture, readings with discussion, and case studies will be the bulk of the “lecture” portion of the course. For the lab, all students will first be guided through structured behavioral observations and experiments that are designed to ensure that they understand how behavior is defined (operational definitions) and how observational and experimental data are collected and analyzed. Graduate students will propose an independent behavioral study, including preparation of an IACUC application. After proposals are approved, students will conduct their experiments independently, collecting relevant data, analyzing data using appropriate statistical methods, and writing a paper in the style of the Journal of Ethology. Graduate students will also present their research in an oral presentation that would be appropriate for a scientific meeting.

H. MAJOR COURSE REQUIREMENTS & GRADING CRITERIA

<table>
<thead>
<tr>
<th>Element</th>
<th>Student Learning Outcome</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture Exams (2 [midterm, final] @ 100 pts each)</td>
<td>1</td>
<td>200</td>
</tr>
<tr>
<td>Case Studies (5 @ 25 pts each [4 lecture, 1 lab])</td>
<td>1, 2</td>
<td>100</td>
</tr>
<tr>
<td>Behavioral Methods Knowledge Assessment (1@50 pts)</td>
<td>4</td>
<td>50</td>
</tr>
<tr>
<td>Lab Reports (5 @ 50 pts each)</td>
<td>2, 4</td>
<td>200</td>
</tr>
<tr>
<td>Reading Summaries (3 @ 25 pts each)</td>
<td>1, 2</td>
<td>75</td>
</tr>
<tr>
<td>Research Prospectus (50 pts)</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td>Journal-style Paper (100 pts)</td>
<td>2, 4</td>
<td>100</td>
</tr>
<tr>
<td>Research Presentation (25 pts)</td>
<td>4</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>800</td>
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</tbody>
</table>

Grades will be assigned as follows:
A = 90% or greater
B = 80-89%
C = 70-79%
F = <70%

I reserve the right to add or delete assignments at any time. If there are fewer or more assignments in a category (e.g., case studies, lab assignments) then the total points used to calculate your final grade will be adjusted to reflect the reduced or increased number of total points available.
I. COURSE CONTENT/SCHEDULE (TENTATIVE)

I RESERVE THE RIGHT TO ALTER THE LECTURE OR LAB SCHEDULE AT ANY TIME

LECTURE SCHEDULE

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 8/20</td>
<td>How is this going to work?? Reading Assignment “Animal Thinking”</td>
<td>Handout</td>
</tr>
<tr>
<td>2 8/25, 27</td>
<td>Intro, proximate and ultimate causes of behavior. Red-backed spider</td>
<td>Chapters 1, 2</td>
</tr>
<tr>
<td>3 9/1, 3</td>
<td>Physiology of Behavior <strong>Reading 1: Physiology of Helping</strong></td>
<td>Chapters 3, 4 Handout</td>
</tr>
<tr>
<td>4 9/8, 10</td>
<td>Learning Case Study 1: Joe Joins the Circus <strong>Reading Summary 1 due</strong></td>
<td>Chapter 5</td>
</tr>
<tr>
<td>5 9/15, 17</td>
<td>Sexual Selection Case Study 2: Widowbirds</td>
<td>Chapter 7</td>
</tr>
<tr>
<td>6 9/22, 24</td>
<td>Mating Systems Habitat selection, territoriality, migration <strong>Reading 2: Spotted Hyena Territoriality</strong></td>
<td>Chapters 8, 14 Handout</td>
</tr>
<tr>
<td>7 9/29, 10/1</td>
<td>Foraging, Catch up if needed <strong>Reading Summary 2 due</strong></td>
<td>Chapter 11</td>
</tr>
<tr>
<td>8 10/6, 8</td>
<td>Midterm Exam (Tuesday 10/6) Kinship</td>
<td>Chapter 9</td>
</tr>
<tr>
<td>9 10/13, 15</td>
<td>Cooperation Case Study 3: Manakin Cooperative Courtship</td>
<td>Chapter 10</td>
</tr>
<tr>
<td>11 10/20, 23</td>
<td>Communication Case Study 4: Animal Structures</td>
<td>Chapter 13</td>
</tr>
<tr>
<td>12 10/27, 29</td>
<td>Aggression Antipredator Behavior <strong>Reading 3: TBD</strong></td>
<td>Chapters 12, 15</td>
</tr>
<tr>
<td>13 11/3, 5</td>
<td>Cultural Transmission, Catch up <strong>Reading Summary 3 due</strong></td>
<td>Chapters 6,</td>
</tr>
<tr>
<td>14 11/10, 12</td>
<td>Play &amp; Personality</td>
<td>Chapters 16, 17</td>
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<tr>
<td>15 11/17, 19</td>
<td>Grad Student Presentations <strong>Final Exam (Thursday)</strong></td>
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</tr>
<tr>
<td>16 11/24</td>
<td>No Class</td>
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</tbody>
</table>

Notes related to case studies, case study readings and assignments, and other non-textbook assigned readings:

- Unless otherwise announced, case studies, will be conducted online in Blackboard SYNCHRONOUSLY – that is, you will have discussion forum etc. during the regularly scheduled class time, usually on Thursday. Readings etc. will be assigned/opened ~ 1 week prior to the date the case study must be completed. Discussion forums and assignments will automatically close when the due date/time is reached and will not be reopened.
- Other readings are assigned periodically. For these readings a 400-500 word (3/4 to 1 page single spaced, 12 pt font) summary will be required and will turned in via a Blackboard assignment. There may or may not be prompts to help with the summary. Due dates will be set in Blackboard and will automatically close; they will not be reopened.
<table>
<thead>
<tr>
<th>Week</th>
<th>Lab</th>
<th>What’s Due?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8/19 No Lab Reading Assignment: Science of Scientific Writing</td>
<td>Handout</td>
</tr>
<tr>
<td>2</td>
<td>8/26 Lecture: Describing/quantifying Animal Behavior Case Study A: What Causes the “Guilty Look” in Dogs?</td>
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<tr>
<td>3</td>
<td>9/2 Exercise: Learning to Describe and Quantify Animal Behavior (Ploger and Yasukawa 2003)</td>
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<tr>
<td>4</td>
<td>9/9 Experiment 1: Pollination Behavior (Tillberg et al. 2007)</td>
<td>Lab Exercise: Techniques Worksheet</td>
</tr>
<tr>
<td>5</td>
<td>9/16 Experiment 2: Shorebird Territoriality/Spacing (Handout)</td>
<td>Experiment 1: Pollination Behavior Report</td>
</tr>
<tr>
<td>6</td>
<td>9/23 Continue Experiment 2</td>
<td></td>
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<tr>
<td>7</td>
<td>9/30 Experiment 3: Dominance-Discovery Payoff (Tillberg et al. 2007)</td>
<td>Experiment 2: Shorebird Report</td>
</tr>
<tr>
<td>8</td>
<td>10/7 Experiment 4: Foraging Behavior; ants and others (Ploger and Yasukawa 2003; others)</td>
<td>Experiment 3: Dominance/Discovery Payoff Report</td>
</tr>
<tr>
<td>9</td>
<td>10/14 Continue Experiment 4</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>10/21 Continue Experiment 4</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>10/28 Experiment 5: Vigilance/Selfish Herds (Tillberg et al. 2007)</td>
<td>Experiment 4: Foraging Behavior Report</td>
</tr>
<tr>
<td>12</td>
<td>11/4 Continue Experiment 5</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>11/11 Open Date if needed, otherwise, no lab</td>
<td>Experiment 5: Vigilance Report</td>
</tr>
<tr>
<td>14</td>
<td>11/18 Open Date if needed, otherwise, no lab</td>
<td></td>
</tr>
</tbody>
</table>
J. COURSE POLICIES

COVID-19
Face Coverings— TAMUCC-Face Coverings (cloth face covering, surgical mask, etc.) must be properly worn in all non-private spaces including classrooms, teaching laboratories, common spaces such as lobbies and hallways, public study spaces, libraries, academic resource and support offices, and outdoor spaces where 6 feet of physical distancing is difficult to reliably maintain. Extra masks will be made available if needed.

Attendance/Tardiness
You are expected to attend every lecture and lab. Courtesy dictates that you will be on time for lecture and lab. For case studies and associated discussion activities you will not get credit for the in-class portion if you do not attend class that day.

For field trips off campus **YOU WILL BE LEFT BEHIND IF YOU ARE NOT ON TIME.**

Late Work and Make-up Exams
Late work is not accepted — this includes losing your opportunity to take the quiz if you are late to lab and leaving lab without turning in your daily worksheet.

For case studies and associated discussion activities you will not get credit for the in-class portion of the activity if you do not attend class that day. This kind of activity cannot be made up.

Make-up lecture exams are only given in the case of extreme circumstances, such as hospitalization or death. Documentation of the circumstances through the appropriate on-campus division will be expected and arrangements must be made **PRIOR** to the exam for a make-up exam to be given.

There are **NO** make-ups for lab exams, including quizzes.

There is **NO** alternate credit given for the field trip. You must attend the field trip to get credit.

Extra Credit
There is **NO** such thing as “extra credit” in this class. In the words of Spongebob Squarepants and Mrs. Puff:

Spongebob: “Mrs. Puff, I don’t feel like I really did anything.”
Mrs. Puff: “That’s how extra credit is supposed to feel.”

For more about my attitude toward extra credit, see this article by Jack Slay Jr. [http://chronicle.com/article/No-Extra-Credit-For-You/44956](http://chronicle.com/article/No-Extra-Credit-For-You/44956)

Cell Phone Use
Please turn off and stow your cell phone when you come to class.

Laptop Use
Many studies have shown that laptops in the classroom are mostly a distraction (to both you and the people around you); this article describes some of the issues [http://www.newyorker.com/tech/elements/the-case-for-banning-laptops-in-the-classroom](http://www.newyorker.com/tech/elements/the-case-for-banning-laptops-in-the-classroom). You may get more words than when you take notes on the computer but the increased number of words does not translate into better grades on quizzes or tests.

While more words were recorded, with more precision, by laptop typists, more ended up being less: regardless of whether a quiz on the material immediately followed the lecture or took place after a week, the pen-and-paper students performed better. The act of typing effectively turns the note-taker into a transcription zombie, while the imperfect recordings of the pencil-pusher reflect and excite a process of integration, creating more textured and effective modes of recall. D. Rockmore, “The Case for Banning Laptops in the Classroom” *The New Yorker*, 6 June 2014.

I think you are generally better off to take notes by hand and transcribing them later. I will tolerate laptop use in class as long as you limit yourself to taking notes. I may also ask that if you use a laptop you sit in a particular
area of the classroom so that you do not distract other students and so that I can more easily monitor your laptop use. If I see you are doing other things, like surfing the web, I will ask you to turn the laptop off.

**Food in Class**
Food or drinks are allowed in the lecture classroom but cannot be taken into the lab.

**Missed Exam**
See “Late Work and Make-up Exams” policies above.

**K. COLLEGE & UNIVERSITY POLICIES & OTHER INFORMATION**

**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)**
I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. Please consult with your academic advisor, the Financial Aid Office, and me, before you decide to drop this course. Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center and filling out a course drop form. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. 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.C0.03, 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 required 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.C0.03, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at http://academicaffairs.tamucc.edu/rules_procedures/assets/13.02.99.c0.03_student_grade_appeals.pdf). 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/

Civil Rights Complaints
Texas A&M University-Corpus Christi is committed to fostering a culture of caring and respect that is free from discrimination, relationship violence and sexual misconduct, and ensuring that all affected students have access to services. For information on reporting Civil Rights complaints, options and support resources (including pregnancy support accommodations) or university policies and procedures, please contact the University Title IX Coordinator, Sam Ramirez (Samuel.ramirez@tamucc.edu) or Deputy Title IX Coordinator, Rosie Ruiz (Rosie.Ruiz@tamucc.edu) x5826, or visit website at Title IX/Sexual Assault/Pregnancy.

Limits to Confidentiality. Essays, journals, and other materials submitted for this class are generally considered confidential pursuant to the University's student record policies. However, students should be aware that University employees, including instructors, are not able to maintain confidentiality when it conflicts with their responsibility to report alleged or suspected civil rights discrimination that is observed by or made known to an employee in the course and scope of their employment. As the instructor, I must report allegations of civil rights discrimination, including sexual assault, relationship violence, stalking, or sexual harassment to the Title IX Coordinator if you share it with me.

These reports will trigger contact with you from the Civil Rights/Title IX Compliance office who will inform you of your options and resources regarding the incident that you have shared. If you would like to talk about these incidents in a confidential setting, you are encouraged to make an appointment with counselors in the University Counseling Center.

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.

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.