

VALDOSTA STATE UNIVERSITY BIOLOGY DEPARTMENT ANIMAL BEHAVIOR SYLLABUS BIOL 4650/6650 – Spring 2022

Instructor Name: Emily Rose, Ph.D.

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Office Location: Bailey Science Building 2211

Office Hours: Tuesday 3:15-5:15, Wednesday 10-12, Thursday 3:15-4:15pm and by appointment, email for arranging virtual meetings with Zoom [link](#)

Lecture & Lab location: Bailey Science Center 1085

Lecture times: Tuesday & Thursday 8:00-9:15am

Lab time: Thursday 9:30am-12:20pm

Course Overview:

BIOL 4650/6650 Animal Behavior. 4 Hours. Prerequisites: BIOL 1107, 1107L, BIOL 1108, 1108L, BIOL 3250 and BIOL 3200. Introduction to the major concepts of causation, development, evolution, and ecology of animal behavior, emphasizing the behavior of social animals.

Required Materials:

Textbook: Animal Behavior: Concepts, Methods, and Applications 3rd Edition by Nordell and Valone, Oxford University Press

Excel- Provided by VSU through your email account

Free online computer programs: ImageJ, BORIS, and Peak Scanner

Tentative Plan for the Course Format:

We will be meeting face-to-face for lecture and labs. We will have several labs that will include fieldwork outside. Students will be required to have access to Excel either on their own machines, in a computer lab or by remote accessing the lab computers to complete assignments. If there are changes to the course format due to COVID-19 you will be notified by Dr. Rose via email and announcements on BlazeVIEW, in addition to the official University emails. If you are unable to attend class in person due to illness, you are responsible for contacting Dr. Rose directly to make arrangements. Online accommodations will only be made for students who have VSU approval.

Course Learning Objectives:

This course covers a wide range of topics within the realm of animal behavior and allows student to develop their own ideas through an experiential learning process. The laboratory portion offers students the opportunity to get directly involved with experimentation and techniques for studying animal behaviors. Students will demonstrate understanding of the scientific principles that relate to the study of animal behavior in an evolutionary context, including

- a. The neural and hormonal control of behavior and the genetic basis of behavior
- b. Optimal foraging behavior and predator-prey dynamics
- c. The behaviors associated with migration and territoriality
- d. The evolution of communication from perspectives of both signaler and receiver
- e. Reproductive behaviors, including differences in sex roles, mating systems, and care of offspring
- f. Social behaviors, such as altruism and reciprocity

Skills will be gained through:

- a. Lectures and discussion of papers from the primary literature
- b. Presentation and discussion of research articles throughout the course
- c. Preparation of an experiment for an area of behavior/organism/system of your choosing with through well-developed hypotheses, experimental design, expected results, and thorough literature review.
- d. Participation in laboratory exercises that explore topics from lecture that we will investigate in more detail.
- e. Communicate effectively about behavioral topics in both oral and written form, reinforced through data analysis and writing assignments throughout the course.

These course objectives are aimed to fulfill the VSU General Educational outcomes 3,4,5 and 7.

This course's set of learning objectives support the outcomes 1, 2 and 5 of the [VSU Selected Educational Outcomes for the B.S. Degree in Biology](#).

Lecture & Lab Policies: Guidelines for your safety and the safety of those around you.

1. No eating or drinking in the lecture or lab.
2. Use hand sanitizer when you enter, wash your hands after the exercises for lab.
3. Know where emergency/first aid equipment and disposal receptacles are for lab. Any injuries should be reported to me immediately!
4. Please dress appropriately for field days. I recommend comfortable closed-toed shoes or water shoes if appropriate for the specific lab, always have drinking water, and some will want to bring sunscreen and/or bug repellent. In addition, fieldtrips are often hot or cold (depending on the time of semester) and may require walking to a destination, so you should dress accordingly.
5. Please respect those around you and wear a mask when in the classroom, computer lab or when within 6 feet outside during the lab.
6. Although we are using a lot of technology for our class, please avoid using your phones or computers for anything else during our class time. We have a lot of focus on and juggle so you need to be 100% committed and focused to the course during your 5.5 hours with me each week. Recordings of the Dr. Rose's lectures are not permitted without her permission.

Grade Determination:

Assessment	Points	<u>Grading Scale:</u>
Participation in Lab and Lecture	50	
Major Lab assignments: Parentage Project Paper (75), Captivity Project poster ppt file (75), Poster peer review (30), Poster presentation (20)	200	≥ 900 pts, A
Discussion ppt/preparation (40), Discussion Presentation (30)	70	800-899, B
Exam 1,2,3, 4 (150pts each)	600	700-799, C
Laboratory Homework Assignments	80	600-699, D
Total Points	1000	<600 pts, F

Participation: Points for participation will be given based on your preparedness and your contribution to the lecture, lab activities and paper discussions. This includes participating in the chat or poll sections of the lecture on BBcollaborate (if we move virtual) and also your level of helping to collect the data and work as a team member during the lab assignments. I will be taking attendance for the COVID contract tracing for all of our class meetings and points will be deducted for students who are chronically late or missing class. Points will be deducted if you come to class or lab late. If you are not prepared for lab or are disrespectful to your fellow classmates or professor you will lose participation points.

Lecture and Lab assignments: For most lab exercises, you will be required to perform graphing/data analysis and/or writing assignments. Some of these you will complete in lab while others will require additional work after lab. These assignments will be explained in detail during lab, and due as noted on Blazeview. Instructions on how to turn in the assignment will be explained when the assignment is given (primarily submitted via the Blazeview assignments link, completed in a google folder, etc.). I reserve the right to adjust the evaluation criteria in the event of extenuating circumstances. There will be a publications provided that require you to contribute discussions and answer questions during class.

Exams: All lecture exams will be closed note on dates stated in the schedule below.

Make-Up Work: Late assignments will be **not be accepted** and make up assignments will be at the sole discretion of the professor. These assignments may or may not exactly duplicate the original and will not entitle other students to the same alternatives since they may not have experienced the same situations.

Course Policies:

Title IX Statement

Valdosta State University (VSU) is committed to creating a diverse and inclusive work and learning environment free from discrimination and harassment. VSU is dedicated to creating an environment where all campus community members feel valued, respected, and included. Valdosta State University prohibits discrimination on the basis of race, color, ethnicity, national origin, sex (including sexual harassment and sexual violence), sexual orientation, gender identity, religion, age, disability, genetic information, or veteran status, in the University's programs and activities as required by applicable laws and regulations such as Title 3 IX. The individual designated with responsibility for coordination of compliance efforts and receipt of inquiries concerning nondiscrimination policies is the University's Title IX Coordinator: the Director of the Office of Social Equity, titleix@valdosta.edu, 1208 N. Patterson St., Valdosta State University, Valdosta, Georgia 31698, 229-333-5463.

Academic Integrity Statement

Cheating, plagiarism, copying and any other behavior that is contrary to University standards of behavior will not be tolerated (Academic Honesty Policies and Procedures). Students caught violating any aspect of the Academic Integrity Code will be penalized in all cases. Penalty ranges from “0” on an assignment to “F” for the course without regard to a student’s accumulated points. Students may also face expulsion. It is the student’s responsibility to become familiar with the policies of the university regarding academic integrity and to avoid violating such policies. By taking this course, you agree that all required course work may be subject to submission for textual similarity review to Turnitin, a tool within BlazeVIEW. For more information on the use of Turnitin at VSU see Turnitin for Students.

Students with Disabilities

Students requiring classroom or testing accommodations because of documented disabilities should discuss their needs with the instructor at the beginning of the semester. If you need accommodations for an exam, you must communicate this information with me at least 1 week before the exam. Students not registered must contact the Access Office, Farber Hall, Phone; 245-2498. Website:
<http://www.valdosta.edu/access/>

Additional Academic Support

The Academic Support Center (ASC) offers all VSU students **free peer tutoring** in core curriculum courses, including math, writing (any subject), chemistry, biology, foreign languages and more. **Please bring your assignments, textbooks, and homework to tutoring sessions.** Also available are **free, one-hour seminars** for help with **study skills, time management**, and a variety of other topics. Visit our office on the main campus, located in Odum Library, 2nd floor, or call 229-333-7570 for an appointment. We also offer 24/7 access to ThinkingStorm, a professional, online tutoring company. To make appointments for either VSU tutors or ThinkingStorm tutors, click the link “Free Tutoring” in Blazeview (under “resources” or “more.”). VSU’s Academic Support Center is also offering online tutoring, see instructions: <https://www.valdosta.edu/administration/finance-admin/campus-wellness/documents/asc-online-tutoring-.pdf>

Experiential Learning Statement

This course includes an Experiential Learning opportunity carefully designed to allow students to explore concepts, skills, and principles beyond the traditional classroom, lab, or studio. Students will have opportunities to make connections across campus, collaborate with others, and apply and synthesize what they have studied in the course. In addition to the experience, students reflect on what they have learned during and at the completion of the course/activity to deepen their learning. Reflections help students transfer skills and concepts to different contexts including ‘real-world’ settings. For more information about Experiential Learning please visit <https://qep.valdosta.edu/experiential-learning/>.

Mental Health Awareness

As a student, you may experience a range of challenges that can interfere with learning, such as strained or violent relationships, death and loss, increased anxiety, substance use, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may diminish your academic performance and/or reduce your ability to participate in daily activities. VSU services are available and treatment does work. You can learn more about confidential mental health services available on campus at: <http://www.valdosta.edu/student/student-services/counseling-center/>. 24 hour emergency help is also available through the University Police at 229-259-5555 who will contact on-call counselors or appropriate resources for support.

Student Online resources

VSU cares about student success both on and offline, and a variety of resources are available to help students both academically and personally during the Spring 2020 semester.

One of the best resources is VSU’s Coronavirus FAQ page located at <https://www.valdosta.edu/health-advisory/faq.php>, Information is available there about internet access, academics, and services, among many other options, including how you can access the Brightspace Pulse app that will allow you to view BlazeVIEW on your smartphone (see <https://www.d2l.com/products/pulse/>). A website devoted to the health and wellness of VSU students can be seen at <https://www.valdosta.edu/administration/finance-admin/campus-wellness/student-resources.php>.

To help students get acclimated to online learning, the University System of Georgia created a quick guide for students to access online courses at <https://sites.google.com/westga.edu/student-guide-online-learning/home>. In BlazeVIEW, all VSU students have a course with guides for how to use tools in BlazeVIEW; search for “VSU BlazeVIEW Student Tutorial Spring 2020.”

Student Opinion of Instruction Statement

At the end of the term, all students will be expected to complete an online Student Opinion of Instruction survey (SOI) that will be available through SmartEvals. Students will receive an email notification through their VSU email address when the SOI is available (generally at least one week before the end of

the term). SOI responses are anonymous to instructors/administrators, and they will be able to access results only after they have submitted final grades. Before final grade submission, instructors will not be able to see any responses, but they can see the percentage of students who have or have not completed their SOIs. While instructors will not be able to see student names, an automated system will send a reminder email to those who have yet to complete their SOIs. Students who withdraw or drop a course will also be sent invitations to complete the Dropped Course Survey. Complete information about the SOIs, including how to access the survey, is available on the [SOI Procedures webpage](#).

Spring 2022- Dr. Rose's Animal Behavior course (BIOL 4650/6650)

Note: The professor reserves the right to make changes to this syllabus as necessary.

Week 1	<p><u>Tuesday 1/11</u> -Introductions & Syllabus -Chapter 1: The Science of Animal Behavior</p>	<p><u>Thursday 1/13</u> -Chapter 2: Methods for Studying Animal Behavior -<u>Lab:</u> Ethograms Part I -Homework: collect data for next week's lab submit lab homework 1 via blazeview link</p>
Week 2	<p><u>Tuesday 1/18</u> -Chapter 3: Evolution and the Study of Animal Behavior</p>	<p><u>Thursday 1/20</u> -Chapter 4: Behavioral Genetics -<u>Lab:</u> Etograms Part II -Students choose pairs and sign up for papers -Homework: read paper for Dr. Rose discussion, submit lab homework 2 via blazeview link</p>
Week 3	<p><u>Tuesday 1/25</u> -Chapter 7: Learning, Neuroethology, and Cognition</p>	<p><u>Thursday 1/27</u> -<i>Discussion:</i> Led By Dr. Rose -<u>Lab:</u> Begin Parentage Project with DNA extractions -Homework: read paper for discussion 1</p>
Week 4	<p><u>Tuesday 2/1</u> -Exam 1</p>	<p><u>Thursday 2/3</u> -<i>Discussion 1</i> -<u>Lab:</u> PP PCRs -Homework: read paper for discussion 2</p>
Week 5	<p><u>Tuesday 2/8</u> -Chapter 12: Mating Behavior</p>	<p><u>Thursday 2/10</u> -<i>Discussion 2</i> -<u>Lab:</u> PP electrophoresis gels & Image J -Homework: read paper for discussion 3, submit lab homework 3 via blazeview link</p>
Week 6	<p><u>Tuesday 2/15</u> -Chapter 13: Mating Systems</p>	<p><u>Thursday 2/17</u> -<i>Discussion 3</i> -<u>Lab:</u> BORIS Part I -Homework: read paper for discussion 4, submit lab homework 4 via blazeview link</p>
Week 7	<p><u>Tuesday 2/22</u> -Chapter 14: Parental Care</p>	<p><u>Thursday 2/24</u> -<i>Discussion 4</i> -<u>Lab:</u> Boris Part II & Peak Scanner Analysis -Homework: read paper for discussion 5, submit lab homework 5 via blazeview link</p>

Week 8	<u>Tuesday 3/1</u> -Exam 2	<u>Thursday 3/3</u> - Chapter 5: Sensory Systems and Behavior - <i>Discussion 5</i> - Homework: Parentage Anaysis Paper-Due date TBD, read paper for discussion 6
Week 9	<u>Tuesday 3/8</u> -Chapter 6: Communication	<u>Thursday 3/10</u> - Chapter 8: Foraging Behavior - <i>Discussion 6</i> - <u>Lab:</u> Design bee foraging experiment - Homework: Parentage Anaysis Paper-Due date TBD, read paper for discussion 7
<u>SPRING BREAK 3/14 – 3/18</u>		
Week 10	<u>Tuesday 3/22</u> -Chapter 9: Antipredator Behavior	<u>Thursday 3/24</u> - <i>Discussion 7</i> - <u>Lab:</u> Data analysis for Bee foraging - Homework: read paper for discussion 8, submit lab homework 6 via blazeview link
Week 11	<u>Tuesday 3/29</u> -Exam 3	<u>Thursday 3/31</u> - Chapter 10: Dispersal and Migration - <i>Discussion 8</i> - <u>Lab:</u> Prepare for Captivity Project: Pairs plan for Wild Adventures trip - Homework: Submit plans as lab homework 7 for next week's field trip via blazeview link
Week 12	<u>Tuesday 4/5</u> -Chapter 11: Habitat Selection, Territoriality, and Aggression	<u>Thursday 4/7</u> - <u>Lab:</u> Captivity Project -Wild Adventures field trip - Homework: Make ethograms for wild adventures videos and collect data for captive videos
Week 13	<u>Tuesday 4/12</u> Chapter 15: Sociality	<u>Thursday 4/14</u> - <u>Lab:</u> Captivity Project Wild data collection - Homework: work on captive vs wild analysis and figures
Week 14	<u>Tuesday 4/19</u> -Chapter 16: Cooperative Behavior	<u>Thursday 4/21</u> - <u>Lab:</u> Captivity Project data analysis and poster assembly - Homework: Finish poster for presenting next week
Week 15	<u>Tuesday 4/26</u> -Exam 4	<u>Thursday 4/28</u> - <u>Lab:</u> Practice presentations of posters - Homework: Peer review poster presentations and turn in final poster ppt file for printing
Finals	<u>Poster Presentation: 9-10am Tuesday 5/3</u>	

