

Biol 339: Animal Behavior Laboratory

Spring 2024

Mondays 1:30-4:20/ 105 ISC

Instructor: Dr. Kristi Hannam
Office: 259 ISC
Phone: 245-5790
Email: hannam@geneseo.edu

Office Hours (in ISC 259): Tuesdays and Thursdays 4:00-5:00, and Friday 10:00-11:00 in ISC 259.
Other times available by appointment – email Dr. Hannam for an appointment suggesting some of your available times.

Walk with Me Appointments: sign up on [Google Calendar](#) to walk and talk Wednesday 2:00-2:30 or Thursday 3:30-4:00

Readings and Lab Handouts will be assigned and available via Brightspace

Learning Outcomes:

Upon completion of this course students will:

1. Produce a variety of written and oral reports that describe observations of animal behavior, and hypothesize explanations for the behaviors to practice different modes of science communication.
2. Participate in development and execution of studies individually and in small groups
3. Apply knowledge of theories of animal behavior by developing original tests of assumptions and hypotheses.
4. Design and carry out an independent investigation of animal behavior by identifying one or more testable hypotheses, carrying out the investigation, analyzing the data, reporting the results and drawing conclusions.

About our course

To successfully access and use the resources needed for this course, and to submit the required assignments, you will need the following technology:

Hardware: a laptop computer (one that fulfills the Geneseo Laptop requirement) and a high-speed internet connection, sound card, speakers or headphones, and a microphone (if there is one built into your laptop, that should be fine)

Software: An internet browser compatible with Brightspace, Adobe Reader, and Google Docs and Google Slides (you may also find Microsoft Word useful).

Course Design: This course is divided into 4 modules, and you will find the course modules labeled on Brightspace. Each module focuses on a theme in the study of in animal behavior, and for each week there will be readings, quizzes, activities, discussions and assignments. The class will meet face-to-face each Monday, and you will have additional lab work to complete outside of this time.

The following schedule of lab activities & experiments is not set in stone. The schedule may change depending on the weather, the availability of study animals or the progress of the class in exploring a particular topic.

Date	Lab Activity
-------------	---------------------

MODULE 1: Observing and Quantifying Animal Behaviors

Jan 22 - Week 1: Sit-Spot Lab / Observations

Jan 29 - Week 2: Ethics in Animal Behavior Research, Defining Animal Behaviors in Ethograms + Stats Exercise

Feb 5 - Week 3: Ethograms 2

Feb 12 - Week 4: Wrap up Ethograms (con't) & Experimental Study of Bird Foraging

MODULE 2: SOME APPROACHES TO STUDYING ANIMAL BEHAVIOR

Feb 19 – Week 5: Ethograms wrap up & Experimental Study of Foraging Behavior in Local Feeder Birds (con't)

Feb 26 - Week 6: Bioacoustics 1

Mar 4 – Week 7: Bioacoustics 2 or Migration

Mar 11 – Spring Break – No Lab Meeting

Mar 18 – Week 8: Honest Signaling & Sexual Selection in Fiddler Crabs

Mar 25 – Week 9: Honest Signaling & Sexual Selection in Fiddler Crabs

April 1 – Week 10: Independent Project 1

MODULE 3: DESIGNING & CONDUCTING YOUR OWN STUDIES IN ANIMAL BEHAVIOR

April 8 – Total Eclipse – NO Classes Today

April 15 - Week 11: Independent Project 2

April 22 - Week 12: Independent Project 3

MODULE 4: PULLING IT ALL TOGETHER

April 29 - Week 14: Data Analysis/Final Write-ups & Presentation Design

May 6 - Week 15: Final Presentations

Grading:

Grades in lab are based on the following:

Participation & Journal Article Discussions	15%
Short Writeups & Quizzes	20%
Lab Reports (1 from module 1; 1 from module 2)	40%
Independent Project	25%
TOTAL	100%

Final grades are earned according to the following point distribution: >93%, A; 90-93%, A-; 87-89%, B+; 83-86%, B; 80-82%, B-; 77-79%, C+; 73-77%, C; 70-72%, C-; 60-69%, D; <60%, E. Under most circumstances, there will be no adjustment to your grades.

Individual Lab Reports (40%)

The two full lab reports are to be written individually. Lab reports should be written in the format of a scientific journal article (specific details will be given in class), and each report will be worth 100 pts. Lab Reports are due approx. two weeks after the experiments in class are complete (see schedule on syllabus), as assigned.

Discussions & Participation (15%)

Your physical presence and active participation in the lab each week – in designing and conducting experiments, in discussion of readings and experimental designs – is worth 15% of your grade. Participation will be graded by the instructor each week using a rubric provided to the students. Three or more absences significantly impacts the learning in this course and will result in a failing grade.

Independent Project (25%)

In the latter part of the semester, students (working individually or in pairs, depending on our campus situation) will design and carry out an independent project. The project will involve the development of a research question, design of methods to address the question, data collection for 6-8 hours of lab time, analysis and presentation of data in a final poster presentation. Additional information will be given in class.

Short Writing Assignments & Quizzes (20%)

For some of the lab experiences and field trips a formal lab report is not required, but an alternative written assignment will be completed and turned in. These assignments will typically be due in class two weeks after the lab experience (see Canvas for dates). In addition, there will be short quizzes on the pre-lab reading assignments for each lab due at the beginning of lab or online depending on the week.

ELECTRONIC DEVICES IN CLASS

Please make sure all cellphones, laptops and other electronic devices are on “silent” during face-to-face class. While laptops and other electronic devices can be useful learning tools in class, there is strong evidence that they can also be serious distractions from learning for the user, and for other people seated around the user. I do request you bring laptops to class on all days (except the first day of class) to access online material, software and data, however, please be mindful of how you use electronic devices in class, and their impact on the other learners around you. Also keep in mind that it is pretty clear to the instructor at the front of the classroom when

electronic devices are being used for learning, and when they are being used for other (usually entertainment and communication) purposes. Not only is it apparent to the instructor, research (Ravizza et al. 2016) measuring the duration of student Internet use in class found that students who used laptops in class for nonacademic reasons had poorer class performance, as indicated by their final grade.

ACCOMMODATIONS

SUNY Geneseo will make reasonable accommodations for persons with documented physical, emotional, or cognitive disabilities. Accommodations will also be made for medical conditions related to pregnancy or parenting. Students should contact the Dean in the Office of Accessibility Services (585-245-5112) and their faculty to discuss needed accommodations as early as possible in the semester.

ACADEMIC DISHONESTY

SUNY-Geneseo's policies on academic dishonesty are summarized in the Code of Student Conduct found in the Geneseo Undergraduate Bulletin online. Plagiarism and other forms of academic cheating are prohibited and may result in a zero on an assignment or exam. Plagiarism and cheating will be reported first to the departmental office, and may be referred to the Campus Judicial Council. Repeated incidents will result in failure of the course. Lab reports and discussion contributions will be checked for plagiarism. If you have any questions about what constitutes academic dishonesty please contact the instructor.

PLAGIARISM

Plagiarism is very serious. If you plagiarize, you will be prosecuted. No excuses. No second chances -- even if you had planned to graduate. Plagiarism doesn't just happen accidentally. You are responsible for determining how to properly cite the work and ideas of other people. If you are unsure or have questions, refer to Milne library's links for citations (under "Research Help"). If you still need assistance, ask your instructor or a librarian.

Students sometimes think that citations are necessary only when using material that is a direct quote. This is not true. A citation is necessary any time you include any information or idea that is not yours (i.e., directly or indirectly derived from someone else's thinking or writing). Any non-original idea that you fail to cite is plagiarized. Plagiarism is intellectual stealing and the consequences of plagiarism are substantial. In order not to be accused of plagiarism, all a student needs to do is properly cite sources.

For the purpose of this policy, plagiarism shall be considered to be deliberate representation of someone else's words or ideas as one's own or the deliberate arrangement of someone else's material(s) as one's own.

COMMUNICATION WITH THE INSTRUCTOR

The best way to communicate with Dr. Hannam this semester is via email (hannam@geneseo.edu) messages or office hours. Dr. Hannam will make every effort to respond to emails/messages sent to her during the workday by 5pm the same day. Emails sent after 4.45pm may not be answered until the following workday depending on Dr. Hannam's schedule outside of work.

**Dr. Hannam will communicate with the class as a whole primarily via "Announcements" on the course Brightspace page. Please make sure you check the "Announcements" page regularly and/or sign up for notifications to your phone or email when additions have been made to the "Announcements" page.

TAKING CARE OF YOUR MENTAL HEALTH

The Biology major is demanding, and as your instructor I try to keep in mind that mine is not the only course you are taking, and that most of you also have other demands on your time and attention in addition to your coursework. Juggling your many responsibilities can have an impact on your mental health. With this in mind, I realize that diminished mental health, including significant stress, mood changes, excessive worry, or problems with eating and/or sleeping can interfere with optimal academic performance. The source of symptoms might be strictly related to your course work; if so, please make an appointment to speak with me one-on-one. I realize, problems with relationships, family worries, loss, or a personal struggle or crisis can also contribute to decreased academic performance.

SUNY Geneseo provides mental health services to support the academic success of students. Counseling Services, a part of the Lauderdale Center for Student Health & Counseling, offers free, confidential psychological services to help you manage personal challenges that may threaten your well-being and success here in college.

In the event I suspect you need additional support, I will express my concerns and the reasons for them, and remind you of resources (e.g., Counseling Services, Career Services, Dean of Students, etc.) that might be helpful to you. It is not my intention to know the details of what might be bothering you, but simply to let you know I am concerned and that help, if needed, is available.

Getting help is a smart and courageous thing to do -- for yourself and for those who care about you.

COPYRIGHT NOTICE

All materials used in this course, including lectures, slides, videos, and handouts, have specific licensing and copyright restrictions that identify how they can be used, distributed, and adapted. The original work created by me, your instructor, is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License. Materials created by other authors have their own licensing and copyright restrictions. Please do not violate the restrictions we have put on our intellectual property. This includes, but is not limited to, transferring files to websites such as StudyBlue and Course Hero, storing old tests in sorority/fraternity test banks, and passing on assignments to friends who may take the course in the future. Be aware that UUP (Union of University Professionals, the union representing faculty on this campus) is seeking to take legal action against groups who violate copyright, and that posting or selling copies of materials to such groups may put a student in legal jeopardy.