Animal Behavior – Biology 338 SPRING 2022

Tuesdays & Thursdays 2:30-3:45 ISC 137

Instructor: Dr. Kristi Hannam (she/her/hers)

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Office Hours (in ISC 259): Mondays 9:30-10:30am; Tuesdays 3:45-4:45pm, Thursdays 11:30-12:30, or by appointment. (If you would like a Zoom link for office hours, contact Dr. Hannam via email)

Required Text: Nordell & Valone. 2017. Animal Behavior Concepts, Methods and Applications ***Plus additional readings from the primary literature***

Learning Outcomes

Upon completion of this course, students will:

- 1. Identify Tinbergen's 4 questions animal behavior and the biological subdisciplines that address them, understand research methods used to answer questions in these four categories, and integrate these diverse fields of study to better understand animal behavior,
- 2. Apply behavioral ecological theory to the interpretation of novel empirical examples;
- 3. Explain the function of behavior in terms of potential evolutionary advantages;
- 4. Review a current question in animal behavior in a poster presentation by selecting appropriate sources, comparing and contrasting them, and evaluating the state of the field in that area of animal behavior.

Pandemic Learning Objectives

We are dealing with an ongoing Pandemic and everything that goes along with that. I hope you will join me in adopting these additional learning objectives. This semester will be a big opportunity for learning for all of us, perhaps in ways we are not expecting, and to be as successful as we can be, let's commit to each other:

- 1. To be patient and kind with ourselves and each other as we navigate new ways of learning.
- 2. To embrace the opportunity to learn in new ways and grow as life-long learners.
- 3. To do our best, knowing that our best may look different than it has in other semesters.
- 4. To communicate openly and clearly about our expectations, concerns, and goals.
- 5. To be flexible. We are in unfamiliar and uncertain times. We're all a still anxious. Circumstances may change over the course of the semester. Let's work together to make this the best class possible, knowing that this may be a moving target.

-credit to @MikkiBrock for sharing a draft of these objectives

Notes about structuring your learning in this course

In this face-to-face course you should expect to be doing approximately 3 hours of work a week for every credit hour. For this course, that means 9 hours of work per week. In a face-to-face course 3 of the 9 hours per week are spent in the classroom listening to lecture, in discussion and small group work. The other 6 hours are spent on your own doing homework and out-of-class project work, reading the assigned readings and studying. I

strong recommend logging into the course Canvas page daily to see updates and comments from your instructor and classmates.

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 Canvas, Adobe Reader, and Google Docs and Google Slides (you may also find Microsoft Word useful).

Course Design: This course is divided into 3 modules, and you will find the course modules labeled on Canvas. Each module focuses on 3-4 topics in animal behavior, and for each topic there will be readings, in-class lectures with posted powerpoint slides, in-class problem set activities and assignments.

Grading

The following exams and assignments will make up your overall grade for the class.

- 15% Reading/Problem Quizzes
- 45% Exams
- 20% Poster Presentation
- 15% Journal Article Discussions/Guest Speaker Engagement/Documentary Review/Reflections 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.

****IMPORTANT**** Canvas' calculation of your overall grade may not be completely accurate. Final calculation of your grade is done by Dr.Hannam off-line according to the grade breakdown above.

QUESTION/PROBLEM SET & READING QUIZZES (15% of your grade)

Reading Quizzes: As indicated in the syllabus and announced in Canvas, there will be a reading quiz on the textbook chapters assigned approximately weekly. Quizzes will have 3-8 multiple choice questions for each chapter assigned, plus 1-2 questions (short answer or multiple choice) on the problems from class the previous week (see next paragraph). The quiz will be open textbook and open note. Each quiz will be open from 12:01am until 11:59pm on Monday, you will have one opportunity to take each quiz, and you will have ~10 minutes (depending on the number of questions) to complete the quiz once you have opened it.

Question/Problem Sets: Over the course of the semester, on Thursday mornings, Dr. Hannam will post a short problem/question set related to the readings and lectures for the week. During all or part of our class meeting at 2:30pm ET there will be time for student problem groups to work together on the problems and to ask questions. The purpose of these assignments and meetings is to give students practice solving the types of problems common in animal behavior, interpreting data from experiments in light of theories and hypotheses discussed in class, designing experiments, and solidifying understanding of important concepts. These questions/problems are very similar to questions posed on the Oral Exams. One or two of the questions from the problem set will be included on the weekly reading quiz that is available on Mondays.

ORAL EXAMS (45% of your grade)

There will be three exams over the course of the semester. Exams will cover material from the textbook and the online lectures, as well as questions about any journal articles, case studies/problem sets or guest speakers from class. Exams are *not* cumulative per se, though there is a great deal of connection among topics in the course so certain themes (eg. cost-benefit analyses, honest signaling, etc) may apply to questions on more than one exam.

Any and all **make up exams** will be oral exams. For the oral exam, 4-5 questions from the exam will be randomly chosen and the student will provide an oral answer to each question during a face-to-face appointment with Dr. Hannam. An oral exam typically takes ~ 12-15minutes to complete.

POSTER PROJECT (20% of your grade):

Each student or pair of students will create a poster addressing a question of their choice in the field of animal behavior. This will require reading and analyzing approximately 4-7 journal articles and **reviewing the state of knowledge about a particular research question**. This assignment will require a significant amount of work and is the equivalent of a review paper, so DO NOT WAIT UNTIL THE LAST MINUTE to begin working on this project. Notice that this project is worth more than any single exam toward your final grade, thus it is worth your while to do very well on this assignment. Specific guidelines will be discussed in class and posted on Canvas. There are two interim assignments associated with this project due before the final product, so be sure to note those on your calendar. Posters will be uploaded and visible to everyone in the course, and required peer evaluation of the posters will occur during the final exam period.

JOURNAL DISCUSSIONS/GUEST SPEAKERS/DOCUMENTARY REVIEW/REFLECTIONS (15% of your grade):

Journal Discussions: We will have three in-class journal discussions over the course of the semester, one during each module. The dates and articles that will be discussed are listed briefly in the syllabus and on the Canvas page. Journal Article discussions will be held on the course Canvas discussion board in assigned small groups. The rubric for participation and for grading the discussion are posted on the course Canvas page.

**Students should expect to see questions about these articles on the exams. **

Guest Speakers: At least 3 guest speakers have been scheduled to present research seminars via Zoom to the class. All the research seminars will be recorded, but each student is required to sign up and attend, live, at least one of the seminars. This assignment is worth up to 10 points. Live attendance at the one seminar you sign up for is worth 8 points, and an additional 2 points may be earned by asking a question of the speaker during the question/answer period.

Documentary Review: Each student will choose a nature/animal documentary of at least 45min in length, and write a review. The guidelines for the review, the rubric for grading it, and a list of suggested films and where they can be found is available on the assignment page in Canvas.

Reflections: Every other week there will be a short online reflection. These reflections ask you to write a minimum of 3-4 sentences (or more, if you are inspired). The prompts may deal with the course material or ask more general reflections about your experience on campus and as a biology major.

OPTIONAL Twitter Assignment

In order to gain an introduction to using social media in a professional context, you have the *option* of participating in a Twitter assignment that may add up to 5% to your final Journal

Discussion/Speaker/Documentary/Reflection portion of your grade. To get full credit (5%) for this assignment, you must tweet to the course hashtag #Behav338 at least once a week (starting Sept 8th) by posting and linking to new course-related content, commenting on journal articles read for class, or linking to the content from other courses to our Animal Behavior course. Details of the assignment will be posted on Canvas.

Late work and Make-up work

In the Canvas Dropboxes for most assignments you will find that the due date/time may be different than the closing date/time. That means it is possible to submit late work (after the due date/time) up until the closing date/time. Late work it typically penalized -10% for each day (24hours) late, and the penalty may be assessed proportionally by time. It is usually possible to submit work after the closing date/time on Canvas, but you should contact Dr. Hannam via email about this.

If you believe you have a valid excuse (illness or other extenuating circumstance) for late work, or need makeup work, you must contact Dr. Hannam as soon as possible, and before the end date of the module in which the work is due. Dr. Hannam will work with each student individually to determine the best solution to the missed deadline.

Tentative Schedule

The following schedule is NOT set in stone, I may change the order of topics. Any changes will be noted on Canvas. More detailed reading notes will be found on Canvas when a whole chapter is not required reading. It is EXTREMELY unlikely Exam dates will change.

DATE	TOPIC	READINGS, ETC
MODULE 1		ETC
JAN 27	Introduction to Animal Behavior, 4 Tinbergen Questions & Proximate/Ultimate	Chapter 2
FEB 1	Methods for Studying Animal Behavior	Chapter 1
FEB 3	Evolution and the Study of Animal Behavior	Chapter 3
FEB 8	Evolution and the Study of Animal Behavior	
FEB 10	Sensory Systems and Behavior	Chapter 5
FEB 15	Sensory Systems and Behavior	
FEB 17	Sensory Systems and Behavior	
FEB 22	Catch Up – Project Work	
FEB 24	Exam 1	
FEB 24-	JOURNAL DISCUSSION 1	
MAR 10		
MODULE 2		
MAR 1	Communication	Chapter 6
MAR 3	Communication	
MAR 8	Guest Speaker – Courtney Sexton	

DATE	TOPIC	READINGS, ETC
MAR 10-31	JOURNAL DISCUSSION 2	
MAR 10	Communication	
MAR 15-17	Spring Break	
MAR 21	Final Poster Topic Due	
MAR 22	Foraging Behavior	Chapter 8
MAR 24	Foraging Behavior	
MAR 29	Guest Speaker – Emily Levy	
MAR 31	Antipredator Behavior	Chapter 9
APR 5	Antipredator Behavior	
APR 7	EXAM 2	
MODULE 3		
APR 12	Reproductive Behavior	Chapter 12
APR 14	Reproductive Behavior	
APR 19	Mating Systems	Chapter 13
APR 21	No Classes – GREAT Day	
APR 22	Documentary Review DUE	
APR 26	Mating Systems	
APR 28	Parental Care	Chapter 14
APR 29	Poster Annotated Bibliography due	
MAY 3	Parental Care	
MAY 5	CATCH UP	
MAY 10	EXAM 3	
MAY 12	Course Wrap Up	
MAY 13	FINAL POSTER DUE	
MAY 16	FINAL EXAM PERIOD – Review of Peer Posters – 3:30-6:00pm	

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 pg. 402. Plagiarism and other forms of academic cheating are prohibited and may result in a zero on an assignment or exam. Any incidents will be reported to the departmental office, and may be referred to the campus Judicial Council. Repeated incidents will result in failure of the course. 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 is via Geneseo email (hannam@geneseo.edu). Dr. Hannam will make every effort to respond to messages sent to her during the workday by 6pm the same day. However, be aware that Dr. Hannam checks messages in batches 2-3 times/day, so may not respond immediately even during the workday. Emails sent after 5pm may not be answered until the following workday depending on Dr. Hannam's schedule outside of work. And Dr. Hannam typically takes one day/week off from work (usually Saturdays), and checks email on weekends only sporadically.

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.

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