Animal Behavior – Biology 338
Fall 2020
Thursdays 2:30-3:45
ONLINE

Instructor: Dr. Kristi Hannam (she/her/hers)
Office: 259 ISC
Phone: 245-5790
Email: hannam@geneseo.edu

Office Hours (online only): Tuesdays 2:30-3:45**; Mondays 10:00-11:00am; Tuesdays 9:30-11am, or by appointment; Tuesday afternoon (2:30) office hours are for this course ONLY
Zoom access to office hours: https://geneseo.zoom.us/j/4946919224?pwd=TVlXZFV2NGZJT2w2WkEwS2pvN042dz09

***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. Apply optimality models to predict behavior under varying ecological conditions
5. 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
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, 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 these 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 bit anxious. Circumstances will likely 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

© 2020 Kristina Hannam
About online learning

This may be the first fully online course that you have taken, and there are significant differences between this and the usual face-to-face courses you are used to. Keep in mind that whether a course is online or face-to-face, 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 would be spent in the classroom listening to lecture, in discussion and small group work. The other 6 hours would be spent doing homework and out-of-class project work, reading the assigned readings and studying. That same 9 hours in this online course will be spent on similar sorts of work, but in somewhat different proportions, and almost all scheduled by you.

Being in an online course gives you more control about the timing of your focus on course material, but the workload should be very similar to a face-to-face course. Online learning in many ways more closely mimics the kind of self-motivated learning that you will do when you leave college, so think of this as training for the the rest of your life. While you have more flexibility about when your focus on course material, you should strongly consider creating a weekly schedule for your work (pace yourself!), and I strongly recommend logging into the course Canvas page daily to see updates and comments from your instructor and classmates.

Since we’ll all be working online and not face-to-face, it is very important that we all use our most respectful “netiquette”. Keep this in mind especially when commenting or responding to each other’s posts and questions.

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, online lectures, activities and assignments. The class will meet online via Zoom once per week on Thursdays. To complete a module, and move on to the next module, you must complete the reading/problem quizzes for that module.

Grading

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

15% Reading/Problem Quizzes
45% Oral Exams
20% Poster Presentation
15% Journal Article Discussions/Guest Speaker Attendance/Documentary Review

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*** Final calculation of your grade is done off-line according to the grade breakdown above.

© 2020 Kristina Hannam
**QUESTION/PROBLEM SET & READING QUIZZES (15% of your grade)**

Reading Quizzes: On each Sunday indicated in the syllabus, there will be a reading quiz on the textbook chapters assigned for that week. Quizzes will have 3-6 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 to complete the quiz once you have opened it.

Question/Problem Sets: Over the course of the semester, on Thursday mornings indicated in the syllabus, Dr. Hannam will post a short problem/question set related to the readings and lectures for the week on our Canvas page. There will be a synchronous (recorded) class meeting at 2:00pm ET for students to ask questions and to answer the problems/questions. Students will be given the opportunity to work on the problem sets in small groups in the online meeting. The synchronous class meetings are not required, and for those who cannot attend, a Zoom recording of the meeting, and when necessary for questions answered in the meeting a supplementary “Answers to Student Questions” document, will be available. 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 often 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 oral 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.

For each oral exam, students will be provided with a pool of 10-20 exam questions at least one week before the exam is due. Thirty-six hours before the exam is due, each individual will receive an email with 3 randomly chosen questions from the pool. Students will answer the 3 questions in an audio or video recording lasting no more than 12 minutes. Recordings must contain the student’s voice answering the questions, and may contain any visual aids that the student deems necessary to answer the question. Each recording must also include an audio statement from the student, affirming that all of the work on the submission is their own (a statement for the student to read will be provided with the exam questions). Student Oral Exam recordings will be uploaded to the Canvas site before the exam deadline. The rubric for grading exam questions will be available on the course Canvas site.

**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 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 © 2020 Kristina Hannam
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 (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.

**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.

**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 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.

If you believe you have a valid excuse (illness or other extenuating circumstance) for late work, or need make-up 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.

© 2020 Kristina Hannam
**This .pdf syllabus is accurate as of the first week of classes 31Aug-4Sept 2020 any updates will only be posted on CANVAS**

**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.

<table>
<thead>
<tr>
<th>MODULE 1</th>
<th>DATE</th>
<th><strong>Topic</strong></th>
<th><strong>Readings</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sept 1</td>
<td>Methods for Studying Animal Behavior</td>
<td>Chapter 2</td>
</tr>
<tr>
<td></td>
<td>Sept 3</td>
<td>Introduction to Animal Behavior</td>
<td>Chapter 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 Tinbergen Questions &amp; Proximate/Ultimate – class meeting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sept 8</td>
<td>Evolution and the Study of Animal Behavior</td>
<td>Chapter 3</td>
</tr>
<tr>
<td></td>
<td>Sept 10</td>
<td>Evolution and the Study of Animal Behavior</td>
<td>Chapter 3</td>
</tr>
<tr>
<td></td>
<td>Sept 13-23</td>
<td>Journal Discussion 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sept 15</td>
<td>Sensory Systems &amp; Behavior</td>
<td>Chapter 5</td>
</tr>
<tr>
<td></td>
<td>Sept 17</td>
<td>Sensory Systems &amp; Human Effects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sept 22</td>
<td>Guest Speaker - Sensory Systems &amp; Behavior</td>
<td>Chapter 5</td>
</tr>
<tr>
<td></td>
<td>Sept 24</td>
<td>Catch Up</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sept 29</td>
<td>Exam 1 Questions released</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oct 6</td>
<td>ORAL EXAM 1 DUE – Module 1</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MODULE 2</th>
<th>DATE</th>
<th><strong>Topic</strong></th>
<th><strong>Readings</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sept 29</td>
<td>Communication</td>
<td>Chapter 6</td>
</tr>
<tr>
<td></td>
<td>Oct 1</td>
<td>Communication</td>
<td>Chapter 6</td>
</tr>
<tr>
<td></td>
<td>Oct 6</td>
<td>Communication</td>
<td>Chapter 6</td>
</tr>
<tr>
<td></td>
<td>Oct 8</td>
<td>Foraging Behavior</td>
<td>Chapter 8</td>
</tr>
<tr>
<td></td>
<td>Oct 13</td>
<td>Foraging Behavior</td>
<td>Chapter 8</td>
</tr>
<tr>
<td></td>
<td>Oct 14</td>
<td>Documentary Review Due</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oct 15</td>
<td>Foraging Behavior</td>
<td></td>
</tr>
</tbody>
</table>
**This .pdf syllabus is accurate as of the first week of classes 31Aug-4Sept 2020 any updates will only be posted on CANVAS**

Oct 17-27  Journal Discussion 2

Oct 20  Antipredator Behavior  Chapter 9

Oct 22  Antipredator Behavior  Chapter 9

Oct 27  Rejuvenation Day

Oct 29  Exam 2 Questions Released  Human Impacts on Behavior

Nov 5  Oral EXAM 2 Due

**MODULE 3**

Nov 3  Reproductive Behavior  Chapter 12

Nov 5  Reproductive Behavior  Chapter 12

Nov 10  Reproductive Behavior  Chapter 12

Nov 12  Mating Systems  Chapter 13

Nov 14-24  Journal Discussion 3

Nov 17  Mating Systems  Chapter 13

Nov 19  Parental Care  Chapter 14

Nov 24  Parental Care

Dec 1  Social Behavior  Ch 15

Dec 3  Social Behavior

Dec 8  Social Behavior – Exam 3 Questions released

Dec 10  Catch-up/Wrap Up

Dec 14  Oral EXAM 3 Due

Dec 15  Poster Presentation DUE

Dec 17-18  Final Exam Period – Online Review of Poster Presentations

© 2020 Kristina Hannam
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.

Communication with the Instructor
The best way to communicate with Dr. Hannam is via Canvas course contact (Canvas inbox or Canvas class discussion question board). The second best way 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 coursework; 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.