

# BIOSC 1440 Animal Behavior Spring Term 2022 Syllabus

## **Faculty**

**Dr. Jessica Stephenson**

**class in A221 Langley, 2.30pm-3.45pm on Tuesdays and Thursdays**

jess.stephenson@pitt.edu

Office Hours: Tuesdays and Thursdays, 12.30pm-1.30pm via Zoom.

If you are unable to make use of office hours for any reason, please feel free to make an appointment. **I am always willing to meet with students individually.**

Office hours will take place through Zoom regardless of the University operating posture. The Zoom links for office hours will be available through Canvas: [canvas.pitt.edu](https://canvas.pitt.edu)

The best way to message me is through Slack. Join the Pitt Biosc 1440 Animal Behavior Slack at the link on the homepage in Canvas.

## **Pre- and Antirequisites**

You must have passed Ecology with a C or better before taking this course. BIOSC 1440 *Animal Behavior* and BIOSC 1140 *Behavioral Ecology* are considered course repeats, and you cannot take both for credit. Although BIOSC 1140 is a field course with an experimental component, both courses cover much of the same material. This policy is effective as of 1/1/2022 unless you are graduating in April 2022.

## **Course Objectives**

The goal of this course is to provide you with an overview of the evolutionary and mechanistic approaches to understanding how and why animals, from insects to humans, behave the way we do. As well as providing examples of how behavioural patterns contribute to an animal's chances of survival and reproductive success, this course will provide a window into the various levels of analysis that researchers use to explain the often complex ways animals behave. After taking this course, you will appreciate the importance of animal behaviour in ecology and evolution, the proximate and ultimate drivers of behaviour, and the approaches researchers use to generate this knowledge.

A big focus of this class is on training you to be able to read, evaluate and synthesise the primary literature. We will discuss eight papers in depth with the class, and with the authors of the papers who will join us for these discussions. For one of these eight, you will make a presentation about the paper that will be peer-reviewed by the class, with my input. Making clear and concise presentations of complex topics is a key skill for success in many careers. Likewise, through reviewing your peer's presentations on primary research, you will gain experience providing helpful feedback to your peers: a vital skill in most professions. You will also gain an in depth understanding of each paper, which will lead to great discussions with professional researchers in the field of animal behavior. For those of you interested in graduate study, these discussions provide a great opportunity to network and practise discussing science with successful researchers from around the world.

Learning about the approaches researchers use to study animal behavior, reading papers, and discussing science with the researchers should prepare you well to think about your own animal behavior research project. This is the basis of the written assignment for this course.

## **Your well-being matters**

Now more than ever, maintaining your well-being is likely to take conscious effort – please make this a priority for this semester. College can be an exciting and challenging time for students. Taking time to care for

yourself and seeking appropriate support can help you achieve your academic and professional goals. I strongly encourage you to maintain a healthy lifestyle by eating a balanced diet, exercising regularly, avoiding drugs and alcohol, getting enough sleep, and taking time to relax.

It can be helpful to remember that we all benefit from assistance and guidance at times, and there are many resources available to support your well-being while you are at Pitt. If you or anyone you know experiences overwhelming academic stress, persistent difficult feelings and/or challenging life events, you are strongly encouraged to seek support. In addition to reaching out to friends and loved ones, consider connecting with a faculty member you trust for assistance connecting to helpful resources. The [University Counseling Center](#) is also here for you. You can call 412-648-7930 at any time to connect with a clinician.

If you or someone you know is feeling suicidal, please call the University Counseling Center at any time at 412-648-7930. You can also contact Resolve Crisis Network at 888-796-8226. If the situation is life threatening, call Pitt Police at 412-624-2121 or dial 911.

### **Grading scheme**

Your final grade for this class will be determined on the basis of your total points earned for the semester. A total of 460 points are possible using the following criteria:

<b>Criterion</b>	<b>Possible points</b>	<b>%</b>
Top three mid-term exam scores (80 each)	240	52
Assignment – research report	60	13
Presentation on a discussion paper	60	13
Completing reviews of 5 presentations (out of 8)	50	11
Participation in 6 discussion sessions (out of 8)	24	5
Submitting questions about 6 discussion papers (out of 8)	6	1
TopHat	20	5
Total	460	100

**Your final grade is based on your total numerical points for the semester:**

A+: 97.0-100%	A: 93.0-96.9%	A-:90.0-92.9%
B+: 87.0-90.0%	B: 83-86.9%	B-:80.0-82.9%
C+: 77.0-80.0%	C: 73-76.9%	C-:70.0-72.9%

If the distribution of class performance scores is skewed, the grading scheme may be curved in your favour, yielding lower point thresholds for each grade. **The curve will never penalize you compared to the following straight grading scale.** I will try to keep Canvas Gradebook up to date, and following this scheme, but please have patience as I figure out its nuances! Know that your numerical grades in Peerceptiv will not be representative of how I use them to calculate your final grade: I will keep Canvas up to date as best I can so you can see your progress.

### **Lectures**

Tuesdays and Thursdays, 2.30-3.45 pm, on Zoom (links on Canvas) until 27<sup>th</sup> January, then in Langley A221. The lectures will be recorded and uploaded automatically to Canvas under both conditions. These recordings will be available on Canvas and are only for use by students in this course during this term. There will be TopHat questions in the lectures for participation points, but these will be available for the full week of the lecture.

### **Top Hat**

**Top Hat Join code is 881729**

All Top Hat functions used in this class are now free to Pitt students. The questions and activities in Top Hat are for participation points only. If you watch the lectures asynchronously, make sure to do so within

the week of the live version so that these questions are still available. **I will close Top Hat activities a week after I use them in the live lectures.**

### **Research report (13% of your grade)**

You will, with support from me, choose a research project, come up with a hypothesis, design an experiment to test predictions of that hypothesis, and present data (made up!) that would support your hypothesis. This assignment will take the form of a research report, with an abstract, introduction, methods and results sections. Once this assignment is 'live', you will have access to a detailed rubric of how these reports will be graded, we will have one class period as a 'workshop' to clarify any issues and help identify good hypotheses and experimental design, and I strongly encourage you to come to office hours to discuss your plans for this report.

### **Discussion sessions – before class**

**We have eight discussion sessions.** A key focus of this class is to engage you in primary animal behavior literature. One way we will do this is through discussion sessions, each focussed on a recent paper. For each paper, a subset of the class will create presentations – each student only needs to do one presentation. These will be peer reviewed by other members of the class (i.e. for every paper for which you're not making a presentation, you should review someone else's presentation), and evaluated by me and my lab, using the software Peerceptiv. Through the making and evaluating of these presentations, you will gain an in depth understanding of each of the papers we discuss through the term. Before class, **everyone** must read the paper, make or review a presentation, and submit one question they would like to discuss about the paper during the class session.

### **Discussion sessions – in class**

In class, you will work with your group of 3-4 to discuss the paper and formulate questions to ask the author. Please see the guide on Canvas on having a good discussion. You will work together to fill the roles of:

- **LEADER:** direct the conversation and keep it flowing, using the questions submitted before the start of class as prompts: these are a great resource! Choose among them the topics you would like to discuss, those that were commonly the topic of questions, and relax and enjoy!
- **MODERATOR:** make sure all members of the group have a chance to talk, the discussion is not dominated by the same individuals, and everyone is treated respectfully.
- **QUESTION ASKER:** ask the author your group's prepared question(s).
- **SCRIBE:** fill in the handout sheet, noting your group's members, their roles (i.e. leader, moderator, question asker, scribe, any members present without an assigned role), and the three questions your group wants to ask the author.

Your discussion participation grade depends on your attendance, that you fulfil each role at least once, and that your group writes three questions for the author. Your lowest two scores as a discussion participant will be dropped. If you are unable to attend some discussion sessions, these will constitute your dropped scores. **These sessions will follow the schedule at the end of this document: make a note of the dates now.**

### **A note about Peerceptiv and peer review in teaching**

Peerceptiv is a peer assessment tool that allows you to give and receive feedback on assignments, such as these presentations. It will help you to better understand the papers we are discussing, and how to improve in future presentations. Both presenting complex ideas and giving constructive feedback are key skills in many careers. Your presentation grade will be based largely on your peers' rating of your presentation – my assessment of your presentation is just one of several reviews you'll receive. This system has been validated to provide reliable grades over a dozen years of research.

We will use Peerceptiv as follows. Presenters will upload their presentations a week before the discussion class, and non-presenters will review one of these presentations. Each presentation may also be reviewed by me/a member of my lab. Grades will be standardised such that the mean and standard deviation are the same across different papers: you should not worry about presentations submitted on some papers being graded more or less generously than others. The reviewing process is double-blind, meaning that you won't know whose presentation you are reviewing or who is reviewing yours.

### ***Presentation (13% of your grade)***

I have uploaded to Canvas a rubric of what makes a great presentation. Your peers will use a similar rubric to rate your presentation in Peerceptiv. Briefly, you should aim for your presentation to be 8-10 minutes in length, and comprise 4-5 slides (1-2 slides on the background; 1 methods; 1 results; 1 discussion). For some papers, this will cover the whole story the paper told, for others you may choose to focus on a particular aspect.

### ***Peer review of presentations (11% of your grade)***

Peerceptiv will grade your peer reviews according to their completeness only. There are eight discussion sessions total, so seven in which you are not making a presentation. For each of these, you will review one of the presentations submitted by your peers. Assuming you participate in all discussions for which you are not making a presentation, your lowest two scores (i.e. missed review) will be dropped.

### ***Exams***

The schedule for this course is attached. Please note the dates of the mid-term examinations (the last one, during finals week is TBD at the moment – I will update you as soon as I know) to avoid any future scheduling conflicts. Three mid-term exams are scheduled during class time, worth 80 points each. The 'final exam' will also be an 80 point mid-term. Each exam will build on problem-solving and basic skills you acquired for previous exams. If you take all four mid-term exams, the lowest score will be dropped. If you miss one of the mid-term exams for any reason, this will be designated as the dropped exam. **Please be aware that there will be no make-up mid-term exams.**

The exams will focus on understanding the concepts taught in class, interpreting data, illustrating functions/processes, and problem solving. The questions will be based primarily on the material covered in the lectures but can include material in the required readings and general questions concerning the literature papers. The tests will focus on the current module, but questions may arise relying on foundational ideas discussed in earlier modules.

If you need to take the exam remotely, you must submit a request form (available on Canvas) at least 24 hours before the exam period. If approved, you will take the exam during the class period while connected via Zoom. **Working with classmates, or anyone else, on exams is strictly prohibited: all work on exams must be your own work. If I catch you helping or being helped by someone on an exam, both of you will receive 0 points.**

### ***Missed Exams and exam regrades***

If you miss more than one mid-term exam you should discuss the options available to you with your advisor or the Dietrich School Dean's Office. Students who miss the final exam due to an emergency should pursue the G grade option as detailed below. If you are unable to complete an exam for a valid reason, please contact me within one week (ideally in advance).

**You may request a regrade of any portion of an exam by submitting your request in writing and explaining why you think the grading was in error.** This request must be submitted to me within one week after the date that the graded exams are returned to the class. Consult the answer key and your textbook prior to submitting your request. Unless the regrade request is simply due to an addition error, please be aware that your entire exam may be evaluated and any question that was graded incorrectly (in your favour) may also be regraded resulting in points deducted from your total. I will go over the most commonly missed questions in class.

### ***Extra credit***

You can gain extra credit in this course by attending the seminars listed on Canvas under 'extra credit'. To confirm your attendance, you must send me three substantive discussion questions about the talk. Attending each seminar, as confirmed by your submitted questions, is worth 3 points.

## **G Grades**

If you wish to petition for a G grade, you must submit a request for this grade in writing to me, and you must document your reason(s). You will be required to make arrangements for the specific tasks that you must complete to remove the G grade. Remember that G grades, according to SAS guidelines, are to be given only when students who have been attending a course and have been making regular progress are prevented by circumstances beyond their control from completing the course after it is too late to withdraw. If you miss the final exam, you may receive a G grade if the above conditions are met.

## **Course load**

BIOSCI 1440 is a 3 credit course, which is defined as 2.5 hours of classroom time and up to 5 hours of independent study per week. I expect you to spend around 5 hours per week – some weeks will be more demanding than others, but there is always more you can learn about the topics we cover. The **minimum** you should be doing is reading the textbook chapters relevant to each lecture, the papers to be discussed during the discussion sessions, as described in the schedule below, plus any additional reading I post on Canvas.

## **Assigned groups**

Because I expect you to take an active role in this course, I have assigned groups so that everyone has a ready-made network of fellow students with whom to discuss the course material, practicalities, and ideas. You will get to know your group, work with them on each of the discussions, and hopefully use them as a great resource throughout the course.

## **Textbook**

The textbook for this course is *Animal Behavior, Rubenstein and Alcock, 11<sup>th</sup> edition*. If you would like to buy your own copy, there are lots of used copies available online, and a reasonably priced eBook. This is included in the 'inclusive access' program so should be free to use for the first weeks of class via Red Shelf. **If you have issues accessing the textbook let me know!** All online resources associated with the textbook are freely available.

## **Academic Integrity Policy**

Cheating and plagiarism will not be tolerated. Students suspected of violating the University of Pittsburgh Policy on Academic Integrity (<http://www.as.pitt.edu/faculty/policy/integrity.html>) will be required to participate in the outlined procedural process as initiated by the instructor. A minimum sanction of a zero score for the quiz, exam or paper will be imposed.

**You must submit for grading only material that is written exclusively in your own words.**

Violation of the Academic Integrity Code requires the instructor to submit an Academic Integrity Violation Report to the Dean's Office.

## **E-mail Communication**

Although e-mail will not be used routinely in this class for communication, occasionally we may send out an e-mail notice using the University e-mail addresses available through Canvas. Such notices will also be posted as Announcements on Canvas, and/or messages in Slack.

Each student is issued a University e-mail address (username@pitt.edu) upon admittance. This e-mail address may be used by the University for official communication with students. Students are expected to read e-mail sent to this account on a regular basis. Failure to read and react to University communications in a timely manner does not absolve the student from knowing and complying with the content of the communications. The University provides an e-mail forwarding service that allows students to read their e-mail via other service providers (e.g. gmail). Students that choose to forward their e-mail from their pitt.edu address to another address do so at their own risk. If e-mail is lost as a result of forwarding, it does not absolve the student from responding to official communications sent to their University e-mail address. To forward e-mail sent to your University account, go to <http://accounts.pitt.edu>, log into your account, click on 'Edit Forwarding Addresses', and follow the instructions on the page.

### **Turnitin**

Students agree that by taking this course all required assignments may be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of Turnitin.com page service is subject to the Usage Policy and Privacy Pledge posted on the Turnitin.com site.

### **COVID-19 safety**

In the midst of this pandemic, it is extremely important that you abide by public health regulations and University of Pittsburgh health standards and guidelines. At a minimum, this means you must wear a face covering and comply with physical distancing requirements; other requirements may be added by the University during the semester. These rules have been developed to protect the health and safety of all community members. Failure to comply with these requirements could result in a Student Conduct violation. For the most up-to-date information and guidance, please visit [coronavirus.pitt.edu](https://coronavirus.pitt.edu).

### **Disability Resources and Services**

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both the instructor and the Office of Disability Resources and Services, 140 William Pitt Union, 412-648-7890 (phone)/412-624-3346 (fax), as early as possible in the term. Disability Resources and Services will verify your disability and determine reasonable accommodations for this course.

### **Code of Conduct**

Our classroom is a place where you will be treated with respect. I welcome people of all ages, backgrounds, beliefs, ethnicities, genders, gender identities, gender expressions, national origins, religious affiliations, sexual orientations, ability – and other visible and invisible differences. All members of this class are expected to contribute to a respectful, welcoming and inclusive environment for every other member of the class, in accordance with the University's Non-discrimination Policy 07-01-03 and the Student Code of Conduct [www.studentaffairs.pitt.edu/conduct](http://www.studentaffairs.pitt.edu/conduct).

### **Sexual Misconduct, Required Reporting, and Title IX**

University faculty and staff members are required to report any instances of sexual misconduct, including harassment and sexual violence, to the University's Title IX office so that the victim may be provided appropriate resources and support options. What this means is that as your professor, I am required to report any incidents of sexual misconduct that are directly reported to me, or of which I am somehow made aware. There are two important exceptions to this requirement about which you should be aware:

- A list of the designated University employees who, as counsellors and medical professionals, do not have this reporting responsibility and can maintain confidentiality, can be found here: <http://www.titleix.pitt.edu/report/confidentiality>
- An important exception to the reporting requirement exists for academic work. Disclosures about sexual misconduct that are shared as part of an academic project, classroom discussion, or course assignment, are not required to be disclosed to the University's Title IX office.

If you are the victim of sexual misconduct, Pitt encourages you to reach out to these resources:

- Title IX Office: 412-648-7860
- SHARE @ the University Counseling Center: 412-648-7930 (8:30 A.M. TO 5 P.M. M-F) and 412-648-7856 (AFTER BUSINESS HOURS)

If you have a safety concern, please contact the University of Pittsburgh Police, 412-624-2121. Other reporting information is available here: <http://www.titleix.pitt.edu/report-0>

## Course Schedule BIOSC 1440 Animal Behaviour Spring Term 2020

<i>Class</i>	<i>Date</i>	<i>Topic*</i>	<i>Chapter‡</i>
Lecture 1	Tu Jan 11 <sup>th</sup>	Introduction to animal behavior	1&2
Lecture 2	Th Jan 13 <sup>th</sup>	Mechanisms: Genetics, Learning & Development	3
Lecture 3	Tu Jan 18 <sup>th</sup>	Mechanisms: Neurobiology	4
Lecture 4	Th Jan 20 <sup>th</sup>	Mechanisms: Hormones	5
	<i>Fri Jan 21<sup>st</sup></i>	<i>Spring term add/drop period ends</i>	
<b>Exam 1</b>	<b>Tu Jan 25<sup>th</sup></b>	<b>Mechanisms: Exam covering lectures 1-4</b>	<b>1-5</b>
<b>Discussion 1</b>	<b>Th Jan 27<sup>th</sup></b>	<b>Mechanisms: Caleigh Guoynes</b>	-
Lecture 5	Tu Feb 1 <sup>st</sup>	Staying alive: Antipredator behavior & foraging	6
Lecture 6	Th Feb 3 <sup>rd</sup>	Staying alive: Habitat selection & Migration	7
Lecture 7	Tu Feb 8 <sup>th</sup>	Staying alive: Communication	8
<b>Discussion 2</b>	<b>Th Feb 10<sup>th</sup></b>	<b>Staying alive: Nigel Anderson</b>	-
Lecture 8	Tu Feb 15 <sup>th</sup>	Staying alive: Animal behavior and disease	-
<b>Discussion 3</b>	<b>Th Feb 17<sup>th</sup></b>	<b>Staying alive: Emily Durkin</b>	-
<b>Exam 2</b>	<b>Tu Feb 22<sup>nd</sup></b>	<b>Staying alive: Exam covering lectures 5-8</b>	<b>6-8</b>
Lecture 9	Th Feb 24 <sup>th</sup>	Assignment workshop	-
Lecture 10	Tu Mar 1 <sup>st</sup>	Reproduction: Sexual selection I	9
<b>Discussion 4</b>	<b>Th Mar 3<sup>rd</sup></b>	<b>Reproduction: Catherine Scott</b>	-
		<i>Spring break</i>	
Lecture 11	Tu Mar 15 <sup>th</sup>	Reproduction: Sexual selection II	9, 10 & 14
<b>Discussion 5</b>	<b>Th Mar 17<sup>th</sup></b>	<b>Reproduction: Tina Barbasch</b>	-
Lecture 12	Tu Mar 22 <sup>nd</sup>	Reproduction: Mating systems & parental care	10, 11 & 14
<b>Discussion 6</b>	<b>Th Mar 24<sup>th</sup></b>	<b>Reproduction: Beatriz Diaz Pauli</b>	-
<b>Exam 3</b>	<b>Tu Mar 29<sup>th</sup></b>	<b>Reproduction: Exam covering lectures 9-12</b>	<b>9-11 &amp; 14</b>
<b>Discussion 7</b>	<b>Th Mar 31<sup>st</sup></b>	<b>Social: Rachael Kramp</b>	-
Lecture 13	Tu Apr 5 <sup>th</sup>	Social: Human behavior	14
<b>Discussion 8</b>	<b>Th Apr 7<sup>th</sup></b>	<b>Social: Sebastian Stockmaier</b>	-
Lecture 14	Tu Apr 12 <sup>th</sup>	Social: Social evolution	12
Lecture 15	Th Apr 14 <sup>th</sup>	Social: Social behavior	13
Lecture 16	Tu Apr 19 <sup>th</sup>	Social: Behavior and conservation	-
Review	Th Apr 22 <sup>nd</sup>	Catch-up and review session	-
<b>Exam 4</b>		<b>Finals week: covers lectures 9-15</b>	<b>12-13</b>

\* *Topic for each day may be adjusted as we progress through the term, but the dates of the exams will not be altered.*

‡ *Please see the more detailed reading assignment on Canvas. Also check for the most up to date syllabus/course schedule.*