

Animal Behavior

Bio472 – Spring 2020

Course Syllabus

Dr. Stacey Weiss:

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Office: Thompson 223H**Phone:** 253-879-2744**Lecture:** MWF 10-10:50 in TH297**Lab AA:** Mon 1-4:50 in HA235**Lab AB:** Tues 1-4:50 in HA235

Office Hours:

Monday 11:00-12:00

Thursday 3:00-4:00

Friday 2:00-3:00

Or by appointment

Course overview: This course will provide a survey of key concepts, theories and models in the field of behavioral ecology, integrating analyses of animal behavior into an explicitly evolutionary framework. We will focus on “proximate questions” of behavior (i.e., the mechanistic causes of behavior), discussing genetic, hormonal, neural and environmental influences on the development and expression of behavior, as well as “ultimate questions” of behavior (i.e., how behaviors are shaped and constrained by ecology and evolutionary history), discussing behaviors important to survival and reproduction. This semester, we will focus on social and reproductive behaviors. Students will actively discuss modern theory, engage in observational and experimental study, and develop an innovative research proposal.

Animal behaviorists relay the importance and excitement of their work in a number of formats including written scientific papers, formal and informal oral presentations, poster presentations, grant proposals, and panel discussions. Students will further develop their scientific communication skills throughout the semester, gaining experience with each of these formats.

Recommended text: Dugatkin, L. A. 2014. *Principles of Animal Behavior*. 3rd edition. New York: Norton and Company. A copy of Dugatkin will be available to you in the lab room. Please do not remove it from the room.

Readings from the scientific literature will be assigned throughout the semester.

A course Canvas site will be updated regularly with course information, lecture Powerpoint slides, assigned readings, and links to articles, stories of interest, important society websites, etc. You will also be turning in many assignments via Canvas. Please visit the site regularly throughout the semester.

Coursework

Your final course grade is made up of the following components:

| Component | % of final course grade |
|------------------------------------|-------------------------|
| Reflection Portfolio | 30% |
| Research Proposal Project | 30% |
| Zoo Study Project | 20% |
| Paper Discussions | 10% |
| Paper Analysis | 5% |
| Pre- and post-labs, handouts, etc. | 3% |
| Class participation | 2% |

Reflection portfolio: Throughout the semester, you will write reflections about course material considering your engagement and intellectual struggle with the material, as well as connections to other courses, experiences, issues of interest, etc. These assignments are ungraded at an individual level, but your final portfolio will be graded, as a whole, at the end of the semester. If you would like to know “where you stand” with the development of your portfolios at any time during the semester, don’t hesitate to set an appointment with me. **See the “Reflection Portfolio” handout posted on Canvas for guidelines.**

Development of a research proposal: Animal behaviorists write grant proposals to various agencies in order to fund their research. In this class, you will complete a series of assignments leading to the development of a creative and innovative research proposal in the field of animal behavior. Any topic which is related to animal behavior can be chosen, even if it is not discussed in class. However, if you are using this course as a Neuroscience Elective, your proposal must relate to the neural underpinnings of behavior.

My hope is that you find a topic for your proposal that really truly motivates and excites you. It is definitely one of those “you-get-out-what-you-put-in” sorts of deals. Who knows... you may end up developing your future PhD project or at least finding your PhD mentor! **A complete list of associated assignments, due dates and guidelines are provided in a packet of information about the Research Proposal posted on Canvas.** You will also find tips for writing an excellent proposal on the course Canvas site.

Proposals will be evaluated by me, as well as by a group of your peers. Each student will read and prepare written evaluations of their peers’ proposals. The proposals will then be reviewed during “panel discussions,” modeled after the panel discussions of real funding organizations. The panel discussion will give you a good idea of how research funds are allocated to scientific research, and provide an opportunity for you to appreciate the efforts and ideas of your classmates.

Zoo Study: Lab groups will work with members of the Pt. Defiance Zoo & Aquarium to develop and conduct a novel research project. You will gain direct experience collecting, analyzing and interpreting behavioral data and the zoo staff will gain important information that may influence future management decisions.

I am very excited by this great opportunity and cannot over-emphasize the need to take the project seriously. The zoo staff members are really busy people and assisting us with our studies will require an additional time commitment from them. To make it worth their while, I have promised them a classload of excellent, dedicated, responsible, trustworthy, reliable students that will provide them with high-quality, usable data. I look forward to delivering on that promise!

On Canvas, please find a packet of information on the Zoo Study and review it fully. It includes a list of associated events, assignment due dates and guidelines for all activities.

Discussions of scientific literature: We will be reading and discussing articles from the scientific literature throughout the semester. All students must come to class well prepared and must provide strong intellectual contributions to the discussion. **See the “Discussions of Scientific Literature”**

handout posted on Canvas for guidelines. You will also self-assess your participation throughout the semester.

Paper analysis: The paper analysis will be due at the end of finals week. It is designed to test your ability to effectively interpret and critically assess the scientific literature, which is a skill we will be working on all semester (see above). I will provide you with the selected paper on the last day of the semester and you are welcome and encouraged to discuss it with your peers throughout reading period. On Monday of finals week, I will email you the analysis questions. At that time, you are no longer permitted to discuss the paper or the analysis questions with anyone (whether they are in or out of the class). The graded analysis must be performed independently.

Lab exercises: Most of our lab periods will be used to support the development of your research proposal and your zoo study. However, we will have a small number of other lab activities that will introduce you to some of the ways animal behaviorists address questions in their field. Attendance is mandatory at all labs; missing two or more labs may result in withdrawal from the course. Some labs will have pre- and/or post-lab assignments. **All lab handouts will be posted on the course Canvas site.**

Participation: Your participation will be assessed by your attendance, your contributions to classroom conversations and activities, and your general classroom behavior. You are expected to be an alert and engaged participant. You are expected to ask questions and make comments that can be heard by the entire class. (I expect that this will come easily for many of you and I challenge the quieter of you to practice adding your voice to the conversation. It's important!) You are expected to follow course guidelines concerning appropriate use of electronics (see below). You are expected to stay on task during group work. And, you are expected to do your part to foster a collaborative, respectful, positive, and supportive learning environment where everyone can feel comfortable contributing. Do these things and get an A for participation.

You are not allowed to turn in (for grading purposes) in-class or in-lab assignments for a class period that you did not attend. However, if you miss a lecture or lab due to an unforeseen emergency, please discuss it with me and I will take this into consideration when assigning final grades.

Other important issues

Electronics in the classroom: When in class, be prepared to focus solely on class and the day's activities. These days, with so many distractions at our fingertips, this takes intentional practice. But it is important. Scientific study shows that multitasking in lecture reduces the learning of not only the multitasker, but also those students who sit *around* the multitasker, even if they self-report no apparent distraction. And anyway, taking class notes on a laptop usually result in lower long-term comprehension of course material, relative to taking notes by hand. Really! See these interesting articles:

- http://www.colorado.edu/physics/EducationIssues/papers/Wilcox/Duncan_2012_AER.pdf
- <http://www.theglobeandmail.com/life/parenting/back-to-school/laptops-in-class-lowers-students-grades-canadian-study/article13759430/>
- <http://www.psychologicalscience.org/index.php/news/releases/take-notes-by-hand-for-better-long-term-comprehension.html>

- https://medium.com/scientific-american/students-are-better-off-without-a-laptop-in-the-classroom-3de1a5432b67?fbclid=IwAR2gljm2gcQgG-aITPHlLaIwdGeHyVvSqLMd0WypMAeloCLLrBM4D_WtsUU

Thus, my preference is that you do not use a **laptop**, tablet, etc. during lecture, though you are welcome to use it to do lab work. Whenever you use electronic devices in class, please follow these expectations: 1) Devices must be muted, and 2) Refrain from engaging with email, instant messaging, social media, videos, and other non-course-specific content. Remember these expectations are to benefit not only your learning, but also the learning of your peers around you. Be considerate. Please note: If you have a personal situation that requires your attention to phone/email/IM during class, please let me know beforehand, have the device set to vibrate, and step outside the classroom to respond to any message.

Classroom etiquette: Let's all work to develop an honest, respectful, collaborative, and supportive learning environment where everyone can feel comfortable contributing. Let's make our classroom a brave space and honor the diversity of experiences we each bring to our learning community. If you feel like your performance in class is being impacted by the classroom climate, please don't hesitate to come and talk with me, or submit anonymous feedback. If necessary to address your concerns, I may make a general announcement to the class. Students that fail to follow classroom expectations described throughout this syllabus may be asked to leave the classroom and/or withdrawn from the class.

Email correspondence: Important course-related information will be communicated to students by email and/or Canvas. I expect that you will monitor your Puget Sound email daily and the course Canvas page at least weekly. Please take a professional approach to your email correspondence with me. It demonstrates respect and is good practice for life post-graduation. Note that it is usually quite inefficient to try to discuss conceptual material via an email exchange, and I enjoy seeing you in my office. Thus, please use email to arrange face-to-face appointments (or swing by office hours!) and do not use it to request answers to specific content-related questions.

Diversity and inclusion in science: In an ideal world, science would be objective. However, much of science is subjective and historically built on a small subset of privileged voices. Thus, even though the material covered in this course is of a scientific nature, I acknowledge that there may be both overt and covert biases within it. Integrating a diverse set of experiences is important for a more comprehensive understanding of science. Please contact me (in person, electronically, or anonymously) if you have suggestions to improve the representation of a diverse group of scientists in course materials.

Getting help: Taken from Smith College's "Failing Well" campaign: Know that you can struggle in your academic and personal life, and "still be a totally worthy, utterly excellent human." If you find yourself struggling this semester, please get help (even if you think of yourself as someone who shouldn't need help). If your struggle is course-related, please come to me with your questions and concerns. If your struggle is outside of this course, I can help direct you to appropriate resources.

Mental health issues (including anxiety, high levels of stress, alcohol/drug problems, strained relationships, feeling down, or loss of motivation) can cause barriers to learning. Puget Sound's Counseling, Health, and Wellness Services are available to help with these or other issues you may experience. You can learn about the free, confidential mental health services available on campus by calling 253.879.1555, visiting <https://www.pugetsound.edu/student-life/counseling-health-and-wellness/>, or emailing chws@pugetsound.edu. Help is always available. When you visit the CHWS website, please also take note of the newly featured TAO resource where there are confidential self-

help resources available 24 hours a day. For urgent mental health support after business hours, including weekends and holidays, a list of resources are available here: <https://www.pugetsound.edu/student-life/counseling-health-and-wellness/emergency-after-hours-care/>. Please take care of yourself. Be kind to yourself and those around you.

Student Accessibility and Accommodation: If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Peggy Perno, Director of the Office of Accessibility and Accommodations, 105 Howarth, 253.879.3395. She will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential; professors are informed of the accommodation but not the underlying diagnosis. If you are unable to get formal accommodation (for example, due to financial circumstances), I am happy to chat with you about possible ways to improve the learning environment for you.

Religious Holidays Accommodations: The university provides reasonable religious accommodations for academic courses and programs, and the university policy is found at <https://www.pugetsound.edu/about/offices-services/human-resources/policies/campus-policies/student-religious-accommodations-in-academic-courses-or-programs/>. If you need a reasonable accommodation due to a religious holiday or organized religious activity, you must give me written notice within the first two weeks of class so that we can coordinate the accommodation. If you have questions about the policy, you may contact the University Chaplain. If you have a grievance about the application of the policy or the handling of your request for an accommodation, you may contact the Dean of the Faculty.

Student Bereavement Policy: Upon approval from the Dean of Students' Office, students who experience a death in the family, including parent, grandparent, sibling, or persons living in the same household, are allowed three consecutive weekdays of excused absences. Should the student feel that additional days are necessary, the student must request additional bereavement leave from the Dean of Students or the Dean's designee. In the event of the death of another family member or friend not explicitly included within this policy, a bereaved student may petition for grief absence through the Dean of Students office. For more information, please see the Academic Handbook.

Copyright and Fair Use: Course materials are subject to the copyright law of the United States (Title 17 U.S. Code). They are for educational purposes only and limited to students enrolled in the course. Further reproduction or distribution is prohibited. Class sessions may not be recorded without prior approval.

Classroom Emergency Response Guidance: Please review university emergency preparedness, response procedures and a training video posted at www.pugetsound.edu/emergency/. There is a link on the university home page. Familiarize yourself with hall exit doors and the designated gathering area for your class and laboratory buildings.

If building evacuation becomes necessary (e.g. earthquake), meet your instructor at the designated gathering area so she/he can account for your presence. Then wait for further instructions. Do not return to the building or classroom until advised by a university emergency response representative.

If confronted by an act of violence, be prepared to make quick decisions to protect your safety. Flee the area by running away from the source of danger if you can safely do so. If this is not possible, shelter in place by securing classroom or lab doors and windows, closing blinds, and turning off room

lights. Lie on the floor out of sight and away from windows and doors. Place cell phones or pagers on vibrate so that you can receive messages quietly. Wait for further instructions.

Academic/scientific integrity: Academic/scientific integrity and respectful conduct are expected to guide your actions (as well as my own) in this class. These qualities are essential for this course which involves group discussions, collaboration, and peer evaluation. I assume that you have committed to the University's Student Integrity Code (<http://www.pugetsound.edu/student-life/personal-safety/student-handbook/student-integrity-code/>), and that you have read and understand the University's policies on Academic Honesty (<http://www.pugetsound.edu/student-life/personal-safety/student-handbook/academic-handbook/academic-integrity/>) as outlined in The Logger. Please talk to me if you have any questions about this information, particularly about plagiarism. You can find more information about plagiarism at <http://www.pugetsound.edu/academics/academic-resources/cwlt/writing/writing-resources/plagiarism/>. Please remember that **avoiding plagiarism requires an active approach**, as even poor note-taking can result in unintentional plagiarism! You must be ever mindful not to misrepresent someone else's work/words/data/figures/etc. as your own.

An act of academic or scientific dishonesty (such as plagiarism; cheating on an exam; or alteration, fabrication, or other misuse of scientific data) will result in a zero for the assignment or project linked to the offense, assuming the incident is your first offense. If I later learn from the registrar that it was a second offense, I reserve the right to give you an F for the course grade. Additional penalties may apply as the University requires that all acts of academic dishonesty are reported to the Dean of Students, who may opt to impose further sanctions.

I wish you loads of success and learning this semester

**I am here to help you develop new knowledge and skills
this semester, so please don't hesitate to ask questions**