Behavioral Ecology 140

UCSC SUMMER 2024

COURSE DETAILS

Instructor: Dr. Pauline Blaimont

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TA & Reader: Amelia Reynolds (ahreynol@ucsc.edu) and Julia Baer

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Lecture Hours: Online Asynchronous **Office Hours:** By appointment (email us)

Website: Canvas

COURSE DESCRIPTION

Behavioral ecology studies the evolutionary and ecological basis of behavior. In this class we explore the proximate causes and ultimate causes of animal behavior utilizing case studies for illustration. We cover theories from evolutionary biology, ecology, and game theory that play into animal behavior. For each theory, we learn about specific experiments and observations that support the theory and illustrate how to test hypotheses in behavioral ecology.



OBJECTIVES

At the end of this course students should be able to...

- 1. Understand the ultimate and proximate causes of behavior and how evolution, ecology and physiology interact
- 2. Critically read and synthesize primary literature in behavioral ecology
- 3. Apply the scientific method and improve scientific writing skills
- 4. Identify and compare the approaches used to study behavioral ecology
- *Learning objectives will be provided at the start of every new topic

REQUIRED MATERIALS

You will need a computer of some sort as this course is run fully online.

There are no required texts. However, if you learn better using a text, many of the subjects discussed in class are covered well the 4th edition of An Introduction to Behavioural Ecology by Krebs and Davies and West (penguins on the cover). I will additionally whenever possible provide optional additional free/online materials to reinforce topics should you choose to use them.



WRITING ASSIGNMENTS



There will be three written assignments. For the first assignment, you will be asked to read a scientific paper and discuss the paper which you will then share with your peers so we can learn some fun example of animal behavior. The second assignment will be an ethogram involving a behavioral budget and hypothesis for why you think the animal performed those behaviors. The third assignment will involve each student conducting behavioral observations of an animal species of their choice and writing a proposal. You will come up with hypotheses about the observed behavior and describe how these hypotheses could be tested. The goal of the third assignment is to be able to apply the course material to animal behavior that you observe and would want to investigate further. The overall goal of all the assignments is to give you a greater understanding of the subjects covered in class and how hypotheses in behavioral ecology are tested. Assignments are due to be uploaded to canvas on the dates provided in the syllabus by midnight. Detailed instructions for each assignment and rubrics will be provided.

EXAMS

There will be short MCQ quizzes after each lesson to ensure you are staying on top of the material. Quizzes are always due the Saturday at the end of that week at midnight. They will be open until Sunday to complete for a late penalty of 50%. Your lowest quiz grade will be dropped. There will also be a midterm and a final which will have short answer responses. The final will not be cumulative, it will only cover material from after the midterm.

GRADE BREAKDOWN

Assignments: 50% of your grade

Paper synthesis = 10%

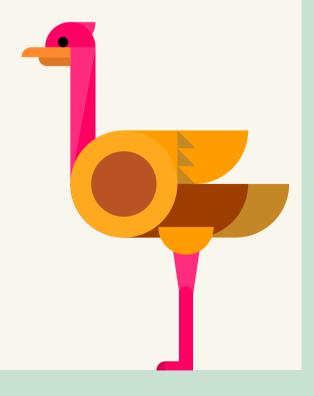
Ethogram = 15%

Proposal = 25% (5% rough; 20% final) **Quizzes: 18% of your grade (lowest**

quiz dropped) Midterm: 16% Final: 16%

DRC STUDENTS

Please be sure to get in touch early in the class and provide any necessary documentation for accommodations and to let me know how I may facilitate your learning experience.



ACADEMIC INTEGRITY

All forms of academic misconduct should be avoided. According to UCSC principles: "Academic misconduct includes but is not limited to cheating, fabrication, plagiarism, or facilitating academic dishonesty." Please see https://ue.ucsc.edu/academic-misconduct.html for more details. The rule for this class is all assignments and tests should reflect your own understanding and written expression of the course material. You will automatically receive zero credit for any exam on which you cheat, or any paper that includes plagiarized material. Please talk with the instructor or the teaching assistants if you have any questions about what constitutes plagiarism. The website https://www.plagiarism.org/ is also a source for showing what constitutes plagiarism and ways to prevent it through proper citation of sources. Repeated cases of cheating or plagiarism will be referred to the administration and may result in failure of the class or dismissal from the University.

No exams will be given prior to the listed dates. No makeup exams will be given, except in case of serious accident, illness, or death in the family. Please inform me ASAP should any of these occur. I am understanding and want to make sure you are accommodated but with such a fast course communication is key!

TEACHING STATEMENT

While this course is online and thus it is more difficult to incorporate group work I will use a variety of methods to get the material across in an effort to accommodate the various learning needs of individuals. Readings, traditional lectures, supplemental videos, discussion boards, study guides and assignments will all be used in this course.

DIVERSITY STATEMENT

I am committed to serve students from diverse backgrounds and perspectives equally in this course, to address the learning needs of students both in and out of class and to view the diversity brought to this class as a resource and advantage. I am committed to presenting the material in a way that is respectful and mindful of gender, sexuality, disability, age, socioeconomic status, race, ethnicity and culture. If there are ways to improve the course in these respects or if any meetings conflict with your religious beliefs, please let me know.



ASSIGNMENT DUE DATES

- 1. Paper Synthesis
 August 7 & 9
- 2. Ethogram
 August 15th
- 3. Research Proposal Draft August 20th
- 4. Research Proposal Final August 28th

All assignments are to be uploaded to Canvas by midnight on the day they are due, 50% will be deducted for each day an assignment is turned. This is because this is a fast course and as such we cannot afford to fall too far behind