Behavioral Ecology 140

UCSC SUMMER 2019

COURSE DETAILS

**Instructor:** Pauline Blaimont, PhD  
**TA:** Regina Spranger  
**Lecture Hours:** CBB 110; MW 9-12:30 pm  
**Office Hours:** CBB 249/246; MW 1-3 pm  
**Emails:** pblaimon@ucsc.edu, rsprange@ucsc.edu  
**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 play into it  
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 (experimental, observational, comparative etc.)

*Detailed learning objectives will be provided at the start of every new topic*

REQUIRED MATERIALS

The only required materials are note-taking materials, I may ask you to turn in work at the end of class for participation credit and thus pen and paper are good to have on hand. **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 have a few copies you are welcome to peruse during office hours if you want and there will be at least one copy on reserve in the Science and Engineering library. 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. The first assignment will be an ethogram involving a behavioral budget and hypothesis for why you think the animal performed those behaviors (1-2 pages). For the second assignments, you will be asked to read a scientific paper and discuss the paper in light of the subjects discussed in class (1-1.5 pages each). The third assignment will involve each student conducting behavioral observations of an animal species of their choice and writing a proposal (2-3 pages). 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 have students be able to apply the course material to animal behavior that they observe. The overall goal of all the assignments is to give students a greater understanding of the subjects covered in class and how hypotheses in behavioral ecology are tested. These assignments should be typed, single-spaced, normal margins, 12 pt font, and standard essay format unless otherwise noted. Assignments are due to be uploaded to canvas on the dates provided in the syllabus by midnight. 10% will be deducted for each day an assignment is late. We will discuss the details regarding individual assignments in class and detailed rubrics will be provided.

EXAMS

Weekly quizzes only on the previous week’s material will be given starting week 2. These will be a mix of question types and typically range from 1-1.5 pages. You will have 30 minutes to complete these at the start of class. Study questions will be provided weekly on the course website to help you study/prepare. Many students have found that writing out the answers to the study questions helps them greatly in preparing for these. Test questions will typically consist of short-answer questions that follow the format of the study questions. The final will be cumulative and made up of study questions so answering these throughout the course and reviewing them will help greatly on the final.

GRADE BREAKDOWN

Class Participation: 10% (attendance and participation)
Assignments: 50% of your grade
   Paper synthesis = 10%
   Ethogram = 20%
   Proposal = 20% (5% rough; 15% final)
Weekly Quizzes: 20% of your grade
Final: 20% of your grade

DRC STUDENTS

Please be sure to introduce yourselves to me (after/before class or during office hours) early in the class and 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 http://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. In such cases verification will be required, and instructor must be informed within 24 hours of the exam if possible.

TEACHING STATEMENT

This course 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 and active learning activities such as think-pair-shares and group work will all be used and mixed in with 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. Ethogram Write-Up
   Wed July 3, 2019

2. Paper Synthesis 1
   Mon July 8, 2019

3. Research Proposal Draft
   Wed July 10, 2019

4. Research Proposal Final
   Mon July 22, 2019

*All assignments are to be uploaded to Canvas by midnight on the day they are due, 10% will be deducted for each day an assignment is turned in late*