BIOE 140 - Summer Session II  
Behavioral Ecology Syllabus  
M/W 1:00 - 4:30 pm, J Baskin Engineering 372

<table>
<thead>
<tr>
<th>Co-Instructors</th>
<th>Email</th>
<th>Office</th>
<th>Office Hours</th>
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<tbody>
<tr>
<td>Caroline Casey</td>
<td><a href="mailto:cbcasey@ucsc.edu">cbcasey@ucsc.edu</a></td>
<td>COH 154A</td>
<td>MW 8-9 am</td>
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<tr>
<td>Sarah McKay Strobel</td>
<td><a href="mailto:sastrobe@ucsc.edu">sastrobe@ucsc.edu</a></td>
<td>COH 251</td>
<td>TTh 12-1 pm</td>
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Tentative course schedule (all dates and assignments are subject to change)

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<tr>
<th>Week</th>
<th>Date</th>
<th>Agenda &amp; Topics</th>
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| 1    | 31 July | Natural Selection, Ecology, and Behavior/Testing Hypotheses  
Paper Discussion           | Reading: Chs. 1 & 2                   |
|      | 2 August | Quiz                              | Reading: Chs. 3 & 6                   |
|      | 7 August | Parental Care and Conflicts/Sex Allocation  
Field Trip - Marine Mammal Research          | Reading: Chs. 8 & 10                   |
|      | 9 August | Quiz                              | Reading: Chs. 7 & 9, Panhuis and Wilkinson 1999  
Disc. Leads: Disc. Assignment  
Research Proposal Outline          |
| 2    | 14 August | MIDTERM EXAM                       | None                                   |
|      | 16 August | Predators versus Prey             | Reading: Ch. 4, Flower 2011  
Disc. Leads: Disc. Assignment          |
| 3    | 21 August | Quiz                              | Reading: Chs. 11 & 13  
Ethogram Assignment          |
|      | 23 August | Quiz                              | Reading: Ch. 12, Clutton-Brock 2009  
Disc. Leads: Disc. Assignment          |
| 4    | 28 August | Communication                      | Reading: Ch. 14  
Research Proposal          |

30 | FINAL EXAM | None |
COURSE DESCRIPTION:
Behavioral ecology is the study of the evolutionary and ecological bases of behavior. In this class we will explore the proximate causes and ultimate functions of animal behavior. We will cover theories from evolutionary biology, ecology, and game theory that make predictions about animal behavior. For each theory, we will cover specific experiments and observations that support the theory to learn how to test hypotheses in behavioral ecology. We will also consider the role of behavior in shaping evolutionary and ecological processes.

COURSE WEBSITE:
The course website is available via Canvas under “Behavioral Ecology”
Login via https://canvas.ucsc.edu/

OFFICE HOURS:
Students are enthusiastically encouraged to attend the office hours. You are welcome to come with specific questions or to just “talk biology.” Office hours at other times are available by appointment. Please refer to the Canvas site for all class instructions and assignments.

REQUIRED TEXTBOOK:

This book is available to check out for 2 hour periods at the Course Reserves desk at the UCSC Science & Engineering Library (Call number QH371.K73 2012). Alternatively, this book is available as an ebook, which you can access online but not download. Please refer to the library record to access this (http://cruzcat.ucsc.edu/record=b4550530~S5).

GRADING RUBRIC:
Proposal Outline - 10%
Ethogram - 10%
Experimental Research Proposal - 15%
Midterm Exam - 20%
Quizzes - 10%
Final Exam - 25%
Paper Discussions - 10%

QUIZZES:
The quizzes are study aids. They are intended to help keep you from falling behind in the material and to help you see where you need to study more. Any material (lecture or reading) that has been covered before the quiz is given is fair game. There will be 3 quizzes total. Quizzes will be graded and handed back to you the following period or at latest two classes later. Quizzes
are solitary exercises to be completed BY YOURSELF IN CLASS. Missed quizzes cannot be made up and the lowest score will NOT be dropped.

PAPER DISCUSSIONS:
Students are expected to have read and thought about the papers before arriving to class. Each student will be assigned to a specific paper as a discussion leader and will be responsible for guiding an in-depth paper discussion in class. In addition, each discussion leader will turn in a written assignment that provides a synopsis and critique of the paper. Please refer to the Files section in Canvas for instructions for this assignment. This will be due in class on the day of the discussion that you are leading (August 9, August 16, or August 23). Although you will be leading the discussion in class as part of a group, you will be graded individually based on your written assignment and participation in the other two in-class paper discussions (10% of final grade).

PROPOSAL:
You will write a paper that proposes an experiment to investigate a topic in behavioral ecology; a 1 page draft will be due August 9th and the final proposal will be due August 28th; additional instructions will be provided. No late assignments will be accepted.

ETHOGRAM:
Assignment based on your observations of an animal’s behavior due August 21st. No late assignments will be accepted.

FIELD TRIPS:
There will be two required field trips. One during the class period of August 7 and the other during the class period of August 21st. The first field trip will be at the UCSC Coastal Science Campus and the second field trip will be at the Natural Reserve on the UCSC Main Campus. For both field trips, we will meet in the classroom at our scheduled time before leaving.

DRC STUDENTS:
If you qualify for classroom accommodations because of a disability, please submit your Accommodation Authorization Letter from the Disability Resource Center (DRC) to us as soon as possible, preferably within the first week of the Summer Session. Contact DRC by phone at 831-459-2089 or by email at drc@ucsc.edu for more information.

EXAM POLICIES & ACADEMIC INTEGRITY:
No exams will be given prior to the specified 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 instructors must be notified within 24 hours of the exam.

Note on missed classes: The instructor is not responsible for providing notes should a student miss class nor is it acceptable to expect wholesale review of all covered material in office hours should a student miss class.

We embrace communal learning and encourage students to form informal study and discussion
groups. However, cheating will lead to a failing grade on the assignment or potentially in the course. Cheating includes (but is not restricted to) copying from a classmate’s exam with or without their consent, completing work for another student, or missing/improper citation of primary sources. All cases of cheating will be discussed with the student and then reported to the University for possible additional disciplinary action, according to the university’s Policy on Academic Integrity, [http://www.ucsc.edu/academics/academic_integrity/undergraduate_students/](http://www.ucsc.edu/academics/academic_integrity/undergraduate_students/)

OTHER BOOKS YOU MAY ENJOY:
(Mostly for fun, though they may also help with the class)

