Animal Behavior (BI 390)
Spring 2015

Instructor: Ashley Robart (ashleyrobart@gmail.com)
Office hours: by appointment

TA: Leif Rasmuson
rasmuson@uoregon.edu

Class schedule: Mondays 8:30 AM to 5 PM

Course Description: Animal behavior studies the evolutionary and ecological basis of behavior. In this class we will explore the proximate causes and ultimate functions of animal behavior, utilizing case studies for illustration. 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, in order to learn how to test hypotheses in behavioral ecology. We will also consider the role of behavior in shaping evolutionary and ecological processes.

Recommended Text: An Introduction to Behavioral Ecology by Krebs and Davies (4th Edition). Lecture material will also include examples from primary literature and other texts.

Evaluation Criteria:
1. Exams: There will be 3 exams. The first will cover approximately weeks 1-3 and is worth 15%; the second exam is worth 20% and will cover weeks 4-6; the final exam is worth 25% and will cover the remainder of the material.
2. Independent project: You will conduct an independent research project, which will be worth 20%. You will present your project to the class and also submit a scientific write-up. Further instructions and grade break-down will be provided.
3. Lab write-up: Scientific write-up of either the lab conducted during weeks 3 or 4 (5%). You will also review a fellow student’s write-up and provide feedback (2%). Additional instructions provided.
4. Ethogram: Short assignment based on your observations of an animal’s behavior (3%)
5. Paper Discussions: Leading discussion one time and participation in all discussions (5%)
6. Participation: General participation in class discussions and activities (5%)

Academic integrity: Cheating will not be tolerated. You will automatically receive zero credit for any exam on which you cheat, or the scientific write-ups if plagiarized material is included. Please talk with myself of Leif if you have any questions about what constitutes plagiarism. Cases of cheating or plagiarism will be referred to the administration and may result in failure of the class or dismissal from the University. Refer to the University website for additional information:
https://uodos.uoregon.edu/StudentConductandCommunityStandards/AcademicMisconduct.aspx
***NOTE: The syllabus below may be updated as we move through the course, so please keep checking for the most current schedule of topics.

Approximate Class Schedule

Week 1.
• 30 March. 8:30 AM: Lecture: Brief History of Animal Behavior and Methods; Review of Evolution; Genetic, Environmental and Learning Effects on Behavior. Lab: Animal observations and ethogram.

Week 2.
• 6 April Lec. 2: Economic Decisions; Competing for Resources. Lab: Larval behavior.

Week 3.
• 13 April Lec. 3: Predators and Prey; Living in Groups. Paper Discussion. Lab: Foraging dynamics of snails

Week 4.
• 20 April Test 1. Lec. 4: Communication. Lab.: Effect of predators on foraging

Week 5.
• 27 April. Lec. 5: Sexual Selection; Mating Systems. Paper Discussion. Lab. Start class projects.

Week 6.
• 4 May Lec. 6: Alternative Breeding Strategies; Sex Allocation; Parental Care. Paper Discussion. Lab.: Class projects.

Week 7.
• 11 May Test 2. Lec. 7: Kin Selection Lab.: Class projects.

Week 8.
• 18 May Lec. 8: Social Behavior; Cooperation. Paper Discussion. Lab.: Class projects.

Week 9.
• 25 May No class

Week 10.
• 1 June Lec. 9: Eusocial behavior; Human Sociobiology. Paper Discussion. Lab.: Present class projects to the class. Project write-ups due later this week (Date TBD).

Week 11.
• 8 June Final exam. (9 am)