

Syllabus
Fall 2016
BISC 677 BEHAVIOR AND CONSERVATION
Tues & Thurs 11-12:15 in Shoemaker 516

INSTRUCTOR: Richard Buchholz, PhD 104 Shoemaker, 915-5012,
byrb@olemiss.edu; Office hours Wed 2pm + by appointment

PREREQUISITES: None, but students without previous courses in behavioral biology may need to complete supplementary readings.

REQUIRED TEXT: No text. Book chapters and journal articles will be assigned weekly.

FORMAT: Professor and student lectures, and discussions, of animal conservation issues. We will discuss journal papers on the subject of the conservation of biodiversity through the study and management of animal behavior.

COURSE SUMMARY: “Conservation Behavior” is a young discipline that investigates how proximate and ultimate aspects of the behavior of animals can be of value in preventing the loss of biodiversity. Despite growing evidence of its efficacy, some early proponents of taking a behavioral approach to conservation have changed their minds. We will evaluate the arguments for and against conservation behavior, discuss behavioral studies that have claimed importance to conservation, and attempt to apply ‘behavior thinking’ to urgent conservation issues.

LEARNING OBJECTIVES: After completing this course, students will:

- have a broad knowledge of the origins of a new sub-discipline of conservation biology
- be able to integrate research results from different fields in the biological and social sciences, and apply this knowledge to solving environmental problems
- develop oral and written communication skills essential to debate and policy-making
- be able to research the literature independently and work effectively at integrating their findings with the work of their classmates for possible publication.

GRADING: The student’s course grade is based on her/his preparedness, participation, effectiveness as a lecturer and discussion leader, timely and thorough completion of assignments, and their contribution to researching, writing and editing a critical review of existing approaches or a synthetic essay on the promise of a previously unexplored aspect of behavior to conservation. The goal of these is to produce a publishable manuscript. The course grade will be determined by a standard grading scale based on the percent of the total points that earned from the following assignments/duties:

Lecture Presentation	100
Discussion Leader	100
Discussion Part/DT	100
Critical Review	<u>200</u>
TOTAL	500

What are these assignments/duties?

Lecture Presentation- you will give a ~ 40 min. PowerPoint lecture on the topic that you've signed up for. This will be an overview of the topic that organizes the subject for the class, provides data and examples to demonstrate the topic's importance, and utilizes teaching techniques such as asking the class to problem solve, evaluate a case study, etc. Below are some topics worthy of presenting. Some of these would also make great critical review topics. Of course you can suggest a behavior conservation issue of your own, but your choice must be approved by Dr. Buchholz.

Examples of possible behavior conservation lecture topics include:

- social networking
- climate change
- invasive species and 'exotics'
- human-animal conflict
- ecotourism
- subspecies and hybrids

Discussion Leader- You will do this twice. First you will lead a fruitful discussion of Dr. B's lecture topic by having the class read two original recent journal articles on the subject. The class will provide you with discussion topics (DTs) beforehand so that you can manage the commentary by your classmates. The second discussion that you lead will be the one following your lecture topic.

Discussion Part/DT- For each class discussion you'll submit a written DT on the readings so that the Discussion Leader (DL) can manage a stimulating and productive discussion. You will be evaluated for your participation in that discussion as well.

Critical Review and Synthetic Essay manuscript- Over the course of the semester you will work on a manuscript with the goal of either criticizing an existing approach to conservation behavior or incorporating a novel behavioral or conservation question into the field of conservation behavior. Some topics could have multiple authors. There are points associated with the developmental stages of this project. Note that the manuscript is due BEFORE Thanksgiving break.

Topic Schedule

Week	Date	Topic	Lecture/Discussion Leader	Readings & Assignments
1	8/23 & 8/25	-First meeting -The biodiversity crisis	Dr. Buchholz	Living Planet Report 2014*
2	8/30 & 9/1	-What is conservation behavior? -Discussion: Alternative approaches	Dr. Buchholz DL: Dr. Buchholz	Buchholz 2007 Individually assigned
3	9/6 & 9/8	-Behavioral mechanisms -Discussion	Dr. Buchholz DL1:	
4	9/13 & 9/15	-Ontogeny & Learning -Discussion	Dr. Buchholz DL2:	
5	9/20 & 9/22	-Adaptive function -Discussion	Dr. Buchholz DL3:	
6	9/27 & 9/29	-Evolutionary history -Discussion	Dr. Buchholz DL4:	
7	10/4 & 10/6	-Where does the conservation behaviorist fit in? -Discussion CC	Dr. Buchholz DL5:	
8	10/11 & 10/13	-Student lecture 1 -Discussion		
9	10/18 & 10/20	-Student lecture 2 -Discussion		
10	10/25 & 10/27	--Student lecture 3 -Discussion		
11	11/1 & 11/3	--Student lecture 4 Discussion		
12	11/8 & 11/10	-Student lecture 5 Discussion		
13	11/15 & 11/17	-Consultations with Dr. B -Manuscript due 11/17 5pm	No classes this week	
14	11/28 & 12/1	-The future of conservation behavior	Dr. Buchholz	
15	12/7	NO FINAL EXAM	Revised manuscripts due by 5pm	

*You can download the Living Planet Report pdf from http://www.footprintnetwork.org/en/index.php/GFN/page/living_planet_report2/