

Biology 3307 (ALP/MC) / 5307 – Animal Behavior – Spring 2013
Lecture T-R 11:00-12:15 WSB 101 (AMS 02)
Syllabus

Instructor: Dr. Christopher M. Ritzi
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Office hours: MW 9-10, TR 2-4 or appt.

Class Website: <http://sulross.blackboard.com> and <http://faculty.sulross.edu/critzi/>

Text: Animal Behavior. 10th Edition or earlier. John Alcock.

Course Description: Animal Behavior is a course that ties together many different aspects of science, including genetics, neurology, communication, and reproductive biology. The goal of this course is to develop an understanding of animal behavior from an evolutionary approach, in such a way that we better understand why one behaves in one way and not another.

Program Learning Outcomes

The graduating biology student graduating with a BS in Biology should be able to:

- 1) Demonstrate a mastery of aerobic respiration and its significance for living organisms.
- 2) Be able to identify evolution and the processes that influence it.
- 3) Be able to identify the components of cell structure and their functions.
- 4) Compare the fundamental concepts of Mendelian genetics.
- 5) Compare and contrast the process of photosynthesis to other cellular processes.
- 6) Be able to identify the processes of molecular biology.

Student Learning Objectives for this Course:

- 1) Students will define the genetic and environmental basis of animal behavior.
- 2) Students will illustrate knowledge of the interaction between genetic and environmental components.
- 3) Students will demonstrate an understanding of the utilization of various forms of communication.
- 4) Students will demonstrate an understanding of the mechanics of reproductive behavior.
- 5) Students will apply gaming theory to social behavior.

Tests: There will be four exams over the course of the term, including a non-comprehensive final exam. Each exam will cover approximately one quarter of the course material as outlined below. The exact timing of these exams will be flexible in keeping with the progress of the lectures. However, in the spirit of fairness, students will be given at least 1 week notice prior to the date of each exam. Exams shall consist of multiple choice/short answer/short essay during class. In addition, graduate students will

be required to complete a set of several take-home questions as secondary exams for each in-class exam.

Grading: Your grade will be assigned based on the percentage of points you get out of total possible. Each exam will account for between 200 and 250 points.

Attendance: Students missing 20% of lectures (6 lectures) may be dropped from the class per the SRSU catalog. Any student dropped for excessive absences will receive an F for the course grade. Please notify your instructor BEFORE missing class for authorized activities, death in the family, or illness. Exams missed for any reason must be made up within one week of the originally scheduled date. **REGARDLESS OF WHY AN ABSENCE OCCURS, YOU MAY BE GIVEN AN F FOR THE COURSE GRADE IF YOU ACCUMULATE SIX ABSENCES.**

Lecture courtesy: The general rules of classroom etiquette are below.

- 1) Please do not talk to others in class while the instructor is lecturing. If you have a question, ASK THE INSTRUCTOR! That's what I'm here for.
- 2) No eating, chewing, dipping, etc.
- 3) Please turn cell phones and pagers to silent while in class. They are disruptive to the entire class, and detract from learning.

Students with disabilities will be provided reasonable accommodations. If you would like to request such accommodations because of physical, mental, or learning disability, please contact the ADA Coordinator for Program Accessibility at at 837-8203, FH 112.

| SUBJECTS TO BE COVERED | | |
|-------------------------------|--|----------------|
| DATE | LECTURE TOPIC | CHAPTER |
| Jan 20 | Introduction and Background | 1 |
| Jan 22 | Proximate and Ultimate Causes of Behavior | 10 |
| Jan 27 | Proximate and Ultimate Causes of Behavior | 10 |
| Jan 29 | Development of Behavior: A Focus on Heredity | 11 |
| Feb 3 | Development of Behavior: A Focus on Heredity | 11 |
| Feb 5 | Exam I – Chapters 1, 10, & 11 | |
| Feb 10 | Development of Behavior: Environmental Focus | 11 |
| Feb 12 | Development of Behavior: Environmental Focus | 11 |
| Feb 17 | Control of Behavior: Neural Mechanisms | 12 |
| Feb 19 | Control of Behavior: Neural Mechanisms | 12 |
| Feb 24 | Control of Behavior: Organizing Mechanisms | 13 |
| Feb 26 | Exam II – Chapters 11-13 | |

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| Mar 3 | Adaptation and Anti-predator Behavior | 5 |
| Mar 5 | Adaptation and Anti-predator Behavior | 5 |
| Mar 10 | Evolution of Feeding Behavior | 5 |
| Mar 12 | Evolution of Feeding Behavior | 5 |
| Mar 17 | Spring Break – No Class | |
| Mar 19 | Spring Break – No Class | |
| Mar 24 | Choosing Where to Live | 6 |
| Mar 26 | Choosing Where to Live | 6 |
| Mar 31 | Evolution of Communication | 4 |
| Apr 2 | Exam III – Chapters 4-6 | |
| Apr 7 | Evolution of Reproductive Behavior | 7 |
| Apr 9 | Evolution of Reproductive Behavior | 7 |
| Apr 14 | Evolution of Mating Systems | 8 |
| Apr 16 | Evolution of Mating Systems | 8 |
| Apr 21 | Evolution of Parental Care | 9 |
| Apr 23 | Evolution of Social Behavior | 2 |
| Apr 28 | Evolution of Social Behavior | 3 |
| Apr 30 | Evolution of Social / Human Behavior | 3, 14 |
| May 5 | Evolution of Social / Human Behavior | 3, 14 |
| May 7 | Dead Day | |
| May 12 10:15 am | Final exam – Chapters 2-3,7-9, and 14 | |

Note – This outline is subject to change for reasons of course interest, time constraint, or instructor whim. The exams will be administered on the dates given, unless material relevant for a given exam has not been covered. Under such cases, an exam may be moved a class period or two to aid in the clarity and understanding of the material.