

Biology 5307.001 – Readings in Ecology – Conservation Biology Syllabus
Fall 2019: TR 11:00 – 12:15 WSB 107

Instructor: Dr. Chris M. Ritzi

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Office hours: MWF 11:00-12:00, R 2:00-5:00, or appt.

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

Text: Groom et al. 2006. Principles of Conservation Biology. Sinauer Associates. You will also be responsible for acquiring supplemental materials and articles from Blackboard.

Course Description: In this course we will read and discuss a variety of papers and topics that helped to shape our current understanding of conservation ecology. The goal for each week is to understand what theory or idea is being presented at the time, and how it affects ideas, policy, and beliefs in conservation. It is everyone's responsibility to read for each week, and to be prepared to discuss the topics. While no one will be designated the "moderator" each week, plan on providing a detailed discussion about each topic. Discussions are meant to be insightful and intelligent, as well as passionate and from the heart.

Program Learning Outcomes

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

- 1) Understanding and implementation of scientific methodology.
- 2) Utilization of field techniques toward addressing scientific questions.
- 3) Be able to utilize statistics toward the analysis of data within the discipline.
- 4) Be able to effectively disseminate scientific findings using both written and oral communication.

Student Learning Objectives for this Course:

- 1) Demonstrate and understanding of evolution in how it relates to conservation biology
- 2) Compare and contrast the differences in land management practices.
- 3) Identify the primary threats to conservation, and propose suggested solutions.
- 4) Identify the facts that shape ones environmental focus.

Tests: There will not be any tests throughout the course, as such. Instead, the course will be graded on participation, preparedness, and the presentation of a class project toward the end of term. The project is to be a 20-30 minute presentation about the conservation issue of your choice (animal, plant, ecosystem, behaviour, etc.). The only exam will be a final essay exam over the core concepts covered in this course.

Grading: You will be assessed 300 points based on your participation and preparedness for each week's class, as well as 100 points on your presentation. The presentation grade will be determined by myself and your peers (in part). The Final Exam will be a 100 pt essay exam.

Attendance: Students missing 20% of lectures (6 class periods) shall be dropped from the class with an F per the SRSU catalog. Please notify your instructor BEFORE missing class for authorized activities, death in the family, or illness.

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

- 1) This is a graduate class, so feel free to talk about the material as a group. This doesn't mean you should talk about other things for the hour.
- 2) No eating, chewing, dipping, etc. (unless it is a brown bag session)
- 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 837-8203, FH 112.

Tentative Lecture Outline

<u>Date</u>	<u>Lecture topic</u>	<u>Chapter</u>
Aug 27	Introduction	Ch 1
Aug 29	What is Conservation Biology?	Ch 1
Sept 3	Global Biodiversity	Ch 2
Sept 5	Threats to Biodiversity	Ch 3
Sept 10	Discussion on Biodiversity	Ch 3
Sept 12	Conservation Values and Ethics	Ch 4
Sept 17	Discussion of Values and Ethics	Ch 4
Sept 19	Habitat Degradation	Ch 6
Sept 24	Habitat Fragmentation	Ch 7
Sept 26	Discussion over Habitat Change	Ch 6&7
Oct 1	Overexploitation	Ch 8
Oct 3	Discussion on Overexploitation	Ch 8
Oct 8	Invasive Species	Ch 9
Oct 10	Discussion on Invasive Species	Ch 9
Oct 15	Climate Change	Ch 10
Oct 17	Discussion on Climate Change	Ch 10
Oct 22	Conservation Genetics	Ch 11
Oct 24	Discussion on Conservation Genetics	Ch 11
Oct 29	Species and Landscape Approach	Ch 12
Oct 31	Ecosystem Approach to Conservation	Ch 13
Nov 5	Discussion on Approaches	Ch 12&13
Nov 7	Protected Areas	Ch 14
Nov 12	Discussion on Protected Areas	Ch 14
Nov 14	Restoration	Ch 15

Nov 19	Discussion on Restoration	Ch 15
Nov 21	Student presentations	
Nov 26	Student presentations	
Nov 28	Nov 27-29 – Thanksgiving Holidays – No Class	
Dec 3	Student presentations	
Dec 5	Dead Day	
Dec 9 - 10:15am	Final Exam for TR 11:00-12:15	

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.