

Biology 5307.001 – Readings in Ecology – Conservation Biology Syllabus
Fall 2022: TR 9:30 – 10:45 WSB 107

Instructor: Dr. Chris M. Ritzi

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Office hours: MW 9-11, TR 3:00-5:00, 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.

Marketable Skills: A student getting a degree in the Biological sciences would be expected to acquire the following marketable skills by graduation.

- 1) Students will be able to organize, analyze, and interpret data.
- 2) Students will be proficient at using presentation software.
- 3) Students will acquire experience in managing time and meeting deadlines.
- 4) Students will gain the ability to speak effectively and write concisely about scientific topics.

- 5) Students will acquire experience and guidance in the development of professional email correspondence.

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, behavior, 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.

SRSU Disability Services: Sul Ross State University (SRSU) is committed to equal access in compliance with Americans with Disabilities Act of 1973. It is SRSU policy to provide reasonable accommodations to students with documented disabilities. It is the student's responsibility to initiate a request each semester for each class. Students seeking accessibility/accommodations services must contact Rebecca Greathouse Wren, LPC-S, SRSU's Accessibility Services Coordinator at 432-837-8203 (please leave a message and we'll get back to you as soon as we can during working hours), or email rebecca.wren@sulross.edu. Our office is located on the first floor of Ferguson Hall (Suite 112), and our mailing address is P.O. Box C-122, Sul Ross State University, Alpine, Texas, 79832.

Tentative Lecture Outline

<u>Date</u>	<u>Lecture topic</u>	<u>Chapter</u>
Jan 11	Introduction	Ch 1
Jan 13	What is Conservation Biology?	Ch 1
Jan 18	Global Biodiversity	Ch 2
Jan 20	Threats to Biodiversity	Ch 3
Jan 25	Discussion on Biodiversity	Ch 3
Jan 27	Conservation Values and Ethics	Ch 4
Feb 1	Discussion of Values and Ethics	Ch 4
Feb 3	Habitat Degradation	Ch 6
Feb 8	Habitat Fragmentation	Ch 7

Feb 10	Discussion over Habitat Change	Ch 6&7
Feb 15	Overexploitation	Ch 8
Feb 17	Discussion on Overexploitation	Ch 8
Feb 22	Invasive Species	Ch 9
Feb 24	Discussion on Invasive Species	Ch 9
Mar 1	Climate Change	Ch 10
Mar 3	Discussion on Climate Change	Ch 10
Mar 8	Spring Break	
Mar 10	Spring Break	
Mar 15	Conservation Genetics	Ch 11
Mar 17	Discussion on Conservation Genetics	Ch 11
Mar 22	Species and Landscape Approach	Ch 12
Mar 24	Ecosystem Approach to Conservation	Ch 13
Mar 29	Discussion on Approaches	Ch 12&13
Mar 31	Protected Areas	Ch 14
Apr 5	Discussion on Protected Areas	Ch 14
Apr 7	Restoration	Ch 15
Apr 12	Discussion on Restoration	Ch 15
Apr 14	Student presentations	
Apr 19	Student presentations	
Apr 21	Student presentations	
Apr 26	Student presentations	
Apr 28	Dead Day	
May 2 – 8:00am	Final Exam for TR 9:30-10:45	

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.

SRSU Distance Education Statement: Students enrolled in distance education courses have equal access to the university's academic support services, such as library resources, online databases, and instructional technology support. For more information about accessing these resources, visit the SRSU website. Students should correspond using Sul Ross email accounts and submit online assignments through Blackboard, which requires secure login. Students enrolled in distance education courses at Sul Ross are expected to adhere to all policies pertaining to academic honesty and appropriate student conduct, as described in the student handbook. Students in web-based courses must maintain appropriate equipment and software, according to the needs and requirements of the course, as outlined on the SRSU website. Directions for filing a student complaint are located in the student handbook.

Libraries: The Bryan Wildenthal Memorial Library in Alpine offers FREE resources and services to the entire SRSU community. Access and borrow books, articles, and more by visiting the library's website, library.sulross.edu. Off-campus access requires logging in with your LoboID and password. Librarians are a tremendous resource for your coursework and can be reached in person, by email (srsulibrary@sulross.edu), or phone (432-837-8123).

Academic Integrity: Students in this class are expected to demonstrate scholarly behavior and academic honesty in the use of intellectual property. A scholar is expected to be punctual, prepared, and focused; meaningful and pertinent participation is appreciated. Examples of academic dishonesty include but are not limited to: Turning in work as original that was used in whole or part for another course and/or professor; turning in another person's work as one's own; copying from professional works or internet sites without citation; collaborating on a course assignment, examination, or quiz when collaboration is forbidden.

Classroom Climate of Respect: Importantly, this class will foster free expression, critical investigation, and the open discussion of ideas. This means that all of us must help create and sustain an atmosphere of tolerance, civility, and respect for the viewpoints of others. Similarly, we must all learn how to probe, oppose and disagree without resorting to tactics of intimidation, harassment, or personal attack. No one is entitled to harass, belittle, or discriminate against another on the basis of race, religion, ethnicity, age, gender, national origin, or sexual preference. Still we will not be silenced by the difficulty of fruitfully discussing politically sensitive issues.

Diversity Statement: "I aim to create a learning environment for my students that supports a diversity of thoughts, perspectives and experiences, and honors your identities (including race, gender, class, sexuality, religion, ability, socioeconomic class, age, nationality, etc.). I also understand that the crisis of COVID, economic disparity, and health concerns, or even unexpected life events could impact the conditions necessary for you to succeed. My commitment is to be there for you and help you meet the learning objectives of this course. I do this to demonstrate my commitment to you and to the mission of Sul Ross State University to create an inclusive environment and care for the whole student as part of the Sul Ross Familia. If you feel like your performance in the class is being impacted by your experiences outside of class, please don't hesitate to come and talk with me. I want to be a resource for you."