

NRM 2301 – Range Resources
Dept. of Natural Resource Management, Sul Ross State University

Spring 2023 – Course Syllabus

Instructor: Dr. Carlos E. Gonzalez

Email: carlos.gonzalez-gonzalez@sulross.edu

Office: 130 RAS

Office hours: Monday and Wednesday, 8:00 AM to 10:00 AM.

Lecture location: RAS 130

Time: Tuesday & Thursday, 9:30 AM - 10:45 AM

Description. Rangelands are vast landscapes covering most of western North America and the earth. Students will examine the ecological principles that cause these grasslands, shrublands, woodlands, and deserts to change or stay the same. The modern challenges of rangeland management must be met with broad thinking and new, sustainable practices to maintain and restore rangelands and the human communities that rely on them. Because of this, we will explore how humans use and manage these ecosystems and the services they provide.

Course Objectives:

1. Understand the ecological concepts relevant to restoring ecosystems and critically think about the scientific/logistic challenges of applying these concepts.
2. Learn how to think critically regarding the structure and relationships of ecosystem modules.
3. Learn the ecological processes that control a specific ecosystem's structure and function

Course Outline. *Tentative and subject to change*

- Introduction to class and syllabus
- Rangeland history
- Rangeland and man
- Rangeland Physical Characteristics
- Description of Rangeland Types
- Range Management and Multiple Use
- Range Ecology
- Range Ecology
 - **Exam 1**
- Range Inventory and Monitoring
- Considerations Concerning Stocking Rate
- Selection of Grazing Methods
- Methods of Improving Livestock Distribution

Range Animal Nutrition
Range Plant Physiology

- **Exam 2**

13-Mar Spring Break

17-Mar Spring Break

Range Livestock Production
Range Wildlife Management
Manipulation of Range Vegetation
Range Management in Developing Countries
Rangeland Economics
Planning, Technology, and the Future
Makeup day
Conclusions and review

- **Exam 3**

May 11 Dead Day

Final Exam

Grading. The grading scale will be A = 90-100%, B = 80-89.9%, C = 70-79.9%, D = 60-69.9%.

Three comprehensive one-hour exams will be given during the semester. Additionally, one final comprehensive one-hour exam will be given at the end of the semester.

- Only the top three grades of the four exams will be used for your final grade.
- All exams will be done through Blackboard.
 - You will have 75 minutes.
 - No makeup exams. If you miss an exam for any reason, you will be given a 0.
 - The material tested on the final exam covers all the information from the entire semester.

<u>Grading</u>	<u>Points</u>
Exam 1	100
Exam 2	100
Exam 3	100
Final Exam	100

Attendance. Attendance in lectures is not required but strongly encouraged, as we will cover material in class that students will not be able to get from any other source.

Course material. Lecture presentations and PDF files with the PowerPoint slides will be uploaded weekly to blackboard.

Class etiquette. Please turn cell phones off at the beginning of each class. Put away all computers during lectures and do not web surf or email during class.

Academic Dishonesty:

Academic dishonesty includes copying, sharing, or obtaining information from an unauthorized source, attempting to take credit for the intellectual work of another person, falsifying information, and giving or receiving information about a test, quiz, or assignment to other students. Any student involved in academic dishonesty will receive no credit (0) for work done and/or may be penalized in accordance with published University Rules.

Counseling and Accessibility Services:

Sul Ross State University is committed to equal access in compliance with the Americans with Disabilities Act of 1973. It is the student's responsibility to initiate a request for accessibility services. Students seeking accessibility services must contact Mary Schwartz, M. Ed., L.P.C., in Counseling and Accessibility Services, Ferguson Hall, Room 112. The mailing address is P.O. Box C-122, Sul Ross State University, Alpine, Texas 79832. Telephone: 432-837-8691. Email: mschwartz@sulross.edu.

Students with Special Needs:

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. Please contact me, Ms. Rebecca Greathouse Wren, M.Ed., LPC-S, Director/Counselor, Accessibility Services Coordinator, Ferguson Hall (Suite 112) at 432.837.8203; mailing address is P.O. Box C-122, Sul Ross State University, Alpine, Texas 79832. Students should then contact the instructor as soon as possible to initiate the recommended accommodations.