

**NRM 4307 – Range and Wildlife Habitat Management**  
**Dept. of Natural Resource Management, Sul Ross State University**  
**Fall 2020 – Course Syllabus**

Instructor: Dr. Carlos E. Gonzalez

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Office: 116 RAS

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

Lecture location: RAS 129

Time: Tuesday & Thursday, 11:00 AM to 12:15 PM.

**Course Description**

Application of knowledge to enhance the productive potential of the rangeland for all uses. Methods for brush management, revegetation, conservation and grazing are included. Improvement for optimum livestock and wildlife throughout habitat characteristics manipulation is emphasized. Two or three one-day field trips on Saturdays are required and will be announced in advance.

**Course Objectives**

Provide an understanding of the special treatments, developments, and structures useful for improving the range resource and to facilitate its use by domestic animals and wildlife. Provide training in the application of range improvements to optimize habitat for wildlife and domestic animals.

**Attendance**

Attendance is mandatory. Each student is responsible for all material presented in lecture, handouts, text, supplemental readings, and class discussion. If the student is absent from lecture, it is the student responsibility to get the lecture material from another classmate.

Text Book (Optional): Roel R. Lopez, M. Morrison, and I. D. Parker. Applied Wildlife Habitat Management (Texas A&M AgriLife Research and Extension Service Series)

**Student Learning Outcomes**

The students will acquire knowledge and skills to develop range evaluation and monitoring programs to accomplish range sustainability, range data analysis and interpretation to determine the biological and economical value of rangelands and elaboration of written reports. The students will be able to understand the practical value of range ecology methods and its application in real life situations.

**Field Trips**

Short field trips during class time will be required to observe different grazing methods, brush control, rangeland improvements, biomass and density sampling. You are required to have a 2-page double spaced font size 12 with font Times new roman, report on what you learned from the field trip by the next lecture class after the field trip. You will be required to attend 2 of the 3 field trips. The schedule for the trips will be announced as private properties grant access to their land.

## Grading

Three comprehensive one-hour exams will be given during the semester. Additionally, assignments will be given during the semester.

<u>Grading</u>	<u>Points</u>
Exam 1	100
Exam 2	100
Exam 3	100
<i>Total possible points</i>	<i>300</i>

A = 90 - 100%

B = 80 - 89%

C = 70 - 79%

D = 60 - 69%

F = <60%

## Course Outline. \*Tentative and subject to change\*

1. Introduction: Range, Wildlife and Humans
2. Rangelands: Types and Ecology.
3. Rangelands: Multiple use and Humans.
4. Rangelands: Challenges.
5. Transition Models: Theory and Applications.
6. Holistic Management: Introduction, Insights, Goals.

### EXAM I

7. Manipulation of vegetation
8. Management Techniques: Grazing, Fire, Mechanical and Chemical.
9. Grazing: Carrying Capacity and Stocking Rate.
10. Grazing: Livestock Distribution and Production.
11. Grazing: Systems and Methods.
12. Grazing: Nutrition

### EXAM II

13. Management Techniques: Fire, Mechanical, and Chemical.
14. Management Techniques: Fire, Mechanical, and Chemical.
15. Management Techniques: Juniper, Prickly pear, Mesquite, and Cholla.
16. Management Techniques: Juniper, Prickly pear, Mesquite, and Cholla.
17. Management Techniques: Deer, Pronghorn, Quail.
18. Management Techniques: Deer, Pronghorn, Quail.
19. Management: NRCS.

### EXAM III

## 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. E-mail: [mschwartz@sulross.edu](mailto:mschwartz@sulross.edu).