

NRM 4307 – Range and Wildlife Habitat Management
Dept. of Natural Resource Management, Sul Ross State University
Fall 2019 – Course Syllabus

Instructor: Dr. Carlos E. Gonzalez

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Office: 116 RAS

Office hours: Monday & Wednesday, 9:00 AM to 11:00 AM.

Lecture location: RAS 129

Time: Tuesday and Thursday, 3:00 P.M. – 3:50 P.M.

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.

Analyze the economic feasibility of improvement practices application.

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): Holecheck, J. L., R. D. Pieper, C. H. Herbel. 2011. Range management principles and practices. Pearson Education Inc., Prentice Hall, One Lake street, Upper Saddle River, NJ.

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

Four comprehensive one-hour exams will be given during the semester. Only the three highest scored exams will be used for your final grade. Additionally, assignments will be given during the semester.

<u>Grading</u>	<u>Points</u>
Exam 1	100
Exam 2	100
Exam 3	100
Final	100
Laboratory assignments	200
Class participation & Attendance	100
Total possible points	700

A = 90 - 100%

B = 80 - 89%

C = 70 - 79%

D = 60 - 69%

F = <60%

** Remember only 3 of the 4 exams will be used for your final grade. This means your final grade will be based on a 600 total point score.**

Course Outline:

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

Course Outline. *Tentative and subject to change*

Laboratory topics:

1. Range plants identification
2. Estimation of biomass production
3. Estimation of brush density
4. Estimation of correct cattle stocking rate
5. Prescribed burning

Dates to remember:

- 1st Exam: September 25
2nd Exam: October 23
3rd Exam: December 4
4th Final Exam: December 11

**** These exam and class dates are tentative and subject to change. ****

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.

Late Work:

Students' class attendance and participation are required. No emailed assignments will be accepted. No consideration of extending a due date will be considered on the day an assignment is due, students should contact the instructor if they are expecting to be unable to meet a deadline. **All late assignments will be assessed a 100% deduction if they are late; no assignments will be accepted after the due days.**

Any time instruction is missed, for any reason, it will count as an absence. College approved field trips, and competitive and leadership development events (with prior instructor approval) are considered legitimate and with proper documentation will not be considered an absence. Seeking an extended deadline due to the above mentioned absences should be arranged before missing the course meeting. In case of emergencies, arrangements for completing assignments should be made immediately upon return to campus.

Use of technology during instruction:

This class is the beginning of your journey to becoming a professional, and the use of personal cell phones, iPads, computers, and other electronic devices can distract learning for all individuals and create an unprofessional environment. However, electronic devices can also be powerful tools to be used in the learning process. Therefore, the use of electronic devices for class purposes, such as note-taking and internet searches is allowed. But, remember that you are now a professional and will be required to act accordingly. So, if you choose to use electronic devices in the classroom, do so in a professional manner.

Academic Integrity:

Students are expected to submit original work without unauthorized assistance. Academic dishonesty, which includes cheating, unauthorized collaboration, plagiarism, fabrication, multiple submissions, and aiding and abetting, will result in a grade of 0 on the work in question. Subsequent instances of academic dishonesty may result in more serious sanctions.

“The University expects all students to engage in all academic pursuits in a manner that is beyond reproach and to maintain complete honesty and integrity in the academic experiences both in and out of their classroom. The University may initiate disciplinary proceedings against a student accused of any form of academic dishonesty, including but not limited to, cheating on an examination or other academic work, plagiarism, collusion, and the abuse of resource materials.”

--Excerpt from the Student Handbook