Ranch Ecosystem Mgt: RCH 4301

Sul Ross State University
Syllabus: Spring 2024

INSTRUCTOR

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COURSE MEETING TIMES

Tuesday and Thursday 11:00-12:45

STUDENT MEETING HOURS

Monday 1:30-3:00 in WSB 314 and Thursday 1:00-4:00 and Friday 9:00-11:00 in RAS 101. I am also available at other times by appointment.

TEXT BOOK AND LIBRARY

Required: **The New Ranch Handbook** This book is available on both Blackboard as a download or you can download it directly from https://quiviracoalition.org/wp-content/uploads/2018/03/New-Ranch-Handbook.pdf

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 LobolD and password. Librarians are a tremendous resource for your coursework and can be reached in person, by email (srsulibrary@sulross.edu), or by phone (432-837-8123).

No matter where you are based, public libraries and many academic and special libraries welcome the general public into their spaces for study. SRSU TexShare Cardholders can access additional services and resources at various libraries across Texas. Learn more about the TexShare program by visiting library.sulross.edu/find-and-borrow/texshare/ or ask a librarian by emailing srsulibrary@sulross.edu.

COURSE DESCRIPTION

Welcome to Ranch Ecosystem Management! This course covers ranch management through an ecosystem approach, with an emphasis on sustainable management and regenerative agriculture. We will use a system approach to include abiotic factors such as soil and water; biotic factors such as plants, livestock and wildlife, and social factors such as job satisfaction and economic benefit.

COURSE STUDENT LEARNING OUTCOMES

Students will be expected to develop the following knowledge throughout the course.
- Students will learn to define and list all parts of the ranch ecosystem with emphasis placed on function
- Students will develop an understanding of how decisions by the ranch manager impact and change ecosystem structure and function, including people as part of the ecosystem
- Students will incorporate all the above aspects in a management plan demonstrating mastery of functional ecosystem concepts

Students will be expected to develop the following general marketable skills throughout the course.
- Team work: Students will develop team work through small group interaction and working together on lab assignments.
- Communication: Students will improve communication skills through group discussions and a written ranch management plan.
- Quantitative and empirical skills: Students will develop quantitative skills in both lecture and lab through calculations of costs and cost/benefit analysis and discussions.
- Critical thinking: Students will practice critical thinking in developing solutions for real world challenges on the SRSU Sierra Blanca Ranch.

PROGRAM STUDENT LEARNING OUTCOMES
The graduating student will be able to demonstrate that he/she is able to:
- Identify species of wildland plants and wildlife common to the western United States and describe their natural history.
- Demonstrate knowledge of elements of an ecosystem
- Communicate about natural resources and conservation both verbally and in writing
- Conduct range and wildlife inventories in a team setting
- Apply knowledge of an ecosystem into a conservation management plan

ADA STATEMENT

SRSU Accessibility Services. Sul Ross State University (SRSU) is committed to equal access in compliance with the 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 Mrs. Mary Schwartze Grisham, LPC, SRSU's Accessibility Services Director at 432-837-8203 or email mschwartze@sulross.edu or contact Alejandra Valdez, at 830-758-5006 or email alejandra.valdez@sulross.edu. Our office is located on the first floor of Ferguson Hall, room 112, and our mailing address is P.O. Box C122, Sul Ross State University, Alpine. Texas, 79832.

ACADEMIC INTEGRITY

Students in this class are expected to demonstrate scholarly behavior and academic honesty in the use of intellectual property. Students should submit work that is their own and avoid the temptation to engage in behaviors that violate academic integrity, such as 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. Students should also avoid using open AI sources *unless permission is expressly given* for an assignment or course. Violations of academic integrity can result in failing assignments, failing a class, and/or more serious university consequences. These behaviors also erode the value of college degrees and higher education overall.

"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." —SRSU Student Handbook
Do your own work and use your own words! I am interested in what YOU know and think!

CLASSROOM ETIQUETTE, ATTENDANCE, & ASSIGNMENT MAKEUP POLICY

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. Disruptive or intimidating behavior will not be tolerated. Disruptive behavior is defined as anything that prevents students from learning and/or prevents the professor from teaching. Especially in discussion forums, participants must be courteous and respectful. To respectfully disagree without contempt is a life skill that will serve you well in the future. You have the right to disagree with others, but you are to do so diplomatically. We will not be silenced by the difficulty of fruitfully discussing sensitive issues.

Supportive Statement

I aim to create a learning environment for my students that supports various perspectives and experiences. I understand that the recent pandemic, economic disparity, and health concerns, or even unexpected life events may 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 a supportive environment and care for the whole student as part of the Sul Ross Community. 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.

Attendance Policy

Come to Class! Much of what we will be learning and discussing is not in a textbook. We are going to be developing skills about analyzing and thinking about problems and this is best accomplished with some group discussion as well as personal analysis. There will also be required field trips. You will lose points if you do not come to class or attend the field trips.

Assignment Make Up Policy

Turn work in on time! If you have a specific circumstance that prevents you from submitting an assignment on time, reach out as soon as possible. If you have a valid reason, you can submit work late. No work will be accepted more than 2 weeks late.

GRADES & DETERMINING YOUR COURSE GRADE

The Bb Grade Center defaults to Calculate as a Running Total. The system does not tabulate final course grades until students complete all assignments. Rather than emailing instructors to ask for your grade, you could view your My Grades page and tabulate current totals. If at any point in the semester you want to gauge your progress, an easy way for you to calculate a projected grade is to divide the number of points you have earned by the total number of points available in the course. This will give you your grade as it stands at a particular moment in the semester (or at least a rough estimate), and then you can calculate out the possibilities for the final grade by projecting various possible grades for the remaining assignments. This information will ultimately help you evaluate your current grade and predict future outcomes.

Field trip participation @ 50 points each   100 points
Lab Assignments and Attendance @50 points each   100 points
> Variable point assignments will be made during the semester. They must be completed and turned in by the due. After the assignment is graded it will be returned to you. ATTENTION: Lab is weighted the same as your midterm and final project. It is 1/3 of your grade. Every time you fail to complete an assignment your homework average drops nearly a letter grade!

Final Project   100 points
> Comprehensive management plan of SRSU Sierra Blanca ranch.

Grade assignment: <60 = F; 60-69 = D; 70-79 = C; 80-89 = B; 90-100 = A;

LAB

You will be completing a lab in class this semester. There will be several assignments that you will need to complete and submit as part of the course. These assignments will be worth 1/3 of your grade for the class. Many of them will be able to be used in your final project. It is important that you attend and participate in lab.

SCHEDULE

Tentative Course Outline:

Lecture #	Topic
1	Introduction
2-4	Soil and erosion management
4-6	Water management
7-11	Planning improvements
12-16	Vegetation management and grazing
17-18	Livestock selection and management
19-21	Management of wildlife and species interactions
22-25	Decision making
26-28	Social implications
	Final project