

NRM 4307/5303 Range and Wildlife Habitat Management
Fall 2016

Instructor:

Mr. Chris Pipes, M.S.

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Office Hours: Monday/Wednesday, 2:30 - 5:00 p.m., or by appointment

Course description:

Principles and practices of range and wildlife habitat management, including range improvement through mechanical, chemical, prescribed burning, and biological manipulation of vegetation, grazing systems, revegetation, and other habitat management practices. Also incorporates the effects of these practices on livestock and wildlife interactions.

Class meetings:

Lecture/lab: M/W 10:00 - 11:50 (or longer for some field trips), RAS 128

For field trips, dress appropriately for walking around in the sun and amongst the bugs, thorns, brush, etc.

TENTATIVE Course Outline:

DATE	Monday	Wednesday
Aug 22/24	Introduction, syllabus, etc.	Principles & Concepts
Aug 29/31	Principles & Concepts (Species selection due)	Types of Rangeland
Sep 5/7	LABOR DAY. NO CLASSES	Brush
Sep 12/14	Controlled Grazing	<i>Field Trip (Mimms Ranch)</i>
Sep 19/21	Controlled Grazing (Field Trip Paper due)	Prescribed Burning
Sep 26/28	Prescribed Burning	Chemical Treatments (Species Paper due)
Oct 3/5	Chemical Treatments	Chemical Treatments
Oct 10/12	Mechanical Treatments	Review
Oct 17/19	Mid-term Exam	Mechanical Treatments
Oct 24/26	Fertilizing/Seeding	Fertilizing/Seeding (Habitat Assessment Paper due)
Oct 31/Nov 2	Water	<i>Field Trip (EMWMA)</i>
Nov 7/9	Fences/Other Improvements (Field Trip Paper due)	Case Study: Riparian Areas
Nov 14/16	Case Study: Riparian Areas	Case Study: Riparian Areas
Nov 21/23	<i>Field Trip (Fort Davis)</i>	TG HOLIDAYS. NO CLASSES.
Nov 28/30	Small Properties (Field Trip Paper due)	Final Review (Habitat Management Paper due)
FINAL	Friday, Dec 2, 10:15 a.m.	

Student Learning Outcomes:

1. Students will be able to state the principles and concepts that drive habitat management.
2. Students will be able to explain how to apply different land management techniques to achieve a desired habitat result.
3. Students will develop a specific plan for habitat management through a series of assignments.

Recommended Text: Wildlife Habitat Management of Forestlands, Rangelands, and Farmlands, Neil F. Payne and Fred C. Bryant, 1998.

Environment Conducive to Learning

Everyone has paid money to attend this class and expects a learning environment free from distraction. In order to maintain that environment, I have the right to enforce rules that prevent distractions. Failure to abide by these rules and to failure to refrain from any other distracting behavior may result in a loss of points for any infractions that occur during the class period in question. Basic rules include, but are not limited to, the following.

1. Gentlemen will remove hats in the classroom.
2. Use of electronic devices (cell phones, iPads, etc.) is prohibited. These must be off the desktop and out of your hands during class time.
3. Foul or offensive language or commentary of a sexual nature is prohibited.
4. Beverages are ok, but eating during class is prohibited.

Other Policies:

1. Roll will be taken during each class meeting. The SRSU catalog states "The instructor may, at his discretion, drop a student from a course when the student has a total of nine absences. An absence is defined as non-attendance in fifty minutes of class. Non-attendance in a one and one-half hour class will constitute one and one-half absences." (In other words, I can drop you from the course if you miss 4 ½ classes.)

3. Missed exam/quiz policy: No make-ups will be provided for unexcused absences and a grade of 0 will be assigned. Request for an excused absence must be made at least 12 hours prior to exam/quiz time. Make-up exams/quizzes should be taken in advance of the normal date/time, or, in extreme circumstances, afterward within one week of the original date/time.

4. If you miss a lecture, obtain notes from a willing classmate. Handouts, assignments, etc. may be obtained from me. The PowerPoint material, handouts, etc. will be posted on Blackboard, but this does NOT constitute all of the material for which you are responsible. In class, I may expound on the material on the screen, write on the board, etc. This additional material is fair game for testing. Thus, attendance is very important.

5. **CHECK BLACKBOARD OR YOUR SUL ROSS E-MAIL AT LEAST ONCE PER DAY!!**

6. Cheating on any exam or assignment will result in an F for that material and possible expulsion from the class with a grade of F.

7. 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.

TENTATIVE Grade Structure:

Species Paper	15%
Habitat Assessment Paper	10%
Habitat Management Paper	15%
Mid-term Exam	20%
Final Exam	20%
Lab activities, other assignments, quizzes, etc. (mostly in class)	10%
Field trips, 2 at 5% each	10%

***** Must attend at least two field trips and turn in a short paper for each to be eligible for more than a "D" in the class. Extra credit will be awarded for attendance with short paper on additional field trips, up to 5 points per trip added to final grade. *****

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

Primary Learning Objectives for the B.S. in Natural Resource Management:

The graduating student will demonstrate that he/she is able to:

1. Identify species of wildland plants and wildlife common to the western United States and describe their natural history.
2. Demonstrate knowledge of the elements of an ecosystem.
3. Communicate about natural resources and conservation both verbally and in writing.
4. Conduct range and wildlife inventories in a team setting.
5. Apply knowledge about elements of an ecosystem into an appropriate conservation management plan.

Species Paper
Due September 30

For this assignment, research and write a paper (typed, double spaced, 12 pt font, 1" margins) on the species assigned to you in class. The paper should include information from peer reviewed journals, books, and reliable websites such as USFWS, the Audubon Society, TPWD, etc. If you use websites, those ending in .com are not acceptable. Websites ending in .gov or .edu are best. Websites ending in .org (nonprofit organizations, but NOT Wikipedia) are ok as long as it's something reputable. Cite all sources. Should be at least 3-5 pages with about 5 sources. Include a BRI publication resource if possible (http://bri.sulross.edu/pubs_reports.html).

For your species you will need to include:

Physical description of the species;

Primary habitat;

Wintering habitat (if none in particular, say so);

Breeding habitat (if none in particular, say so);

Cover type required for the aforementioned habitats (types of vegetation, how much of each, etc.);

Any special habitat needs (minimum amount of space, specific nest-building material, etc.);

Foraging strategies;

Food sources;

Daily water requirements (how much) and type (free, preformed, or metabolic);

Breeding strategies and behaviors;

Conservation status with USFWS, TPWD, and IUCN Red List (websites provided on Blackboard);

Population status (how many total do we think there are and where are they);

Any other information that is pertinent to designing a habitat management plan for the species.