

BSC 497 Ecological Restoration
Course Syllabus
Tuesday, 6:00 pm- 8:40 pm
STC 123

Instructor: Jim Eidson, M.S. Rangeland Ecology and Management
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Course Objectives

This course is intended to be a brief survey of the foundations of and a more in-depth look at the techniques used in ecological restoration and wildland revegetation. Emphasis will be on grassland restoration and reconstruction, though other habitats will be considered. The course will be primarily lecture with several local field trips. The following course outline may be amended as opportunities arise.

Text

Whisenant, Steven G., 1999. Repairing Damaged Wildlands: A Process-Oriented, Landscape Scale Approach. Cambridge University Press

Grades

Tests will be based on a combination of lecture notes, handouts and assigned reading. An end of semester project (including a paper and class presentation) will be a restoration/reconstruction plan for an actual small site selected by the instructor. Grades will be based on: 1) Two tests and a comprehensive final examination (300 pts) and 2) a restoration/reconstruction plan (200 pts).

Expectations

Because the class meets once per week, a great deal of material will be covered in each class. It will be impossible for you to perform well in this course without attending all classes. However, if you miss a class, you should exercise all due diligence to acquire lecture notes, handouts and related material. This is your responsibility.

It should be obvious to all that distractions in the classroom are to be kept to a minimum. Please:

- No cell phones on
- No talking during lectures
- No headphones, disk players, etc.

However, you may use recording devices in the lecture—audio recorders are fine, but talk to me first about video.

Students with Disabilities:

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation for their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services
Texas A&M University-Commerce,
Halladay Student Services Building,
Room 303A/D
(903) 886-5835. or (903) 886-5150

Fax (903) 468-8148

StudentDisabilityServices@tamu-commerce.edu

Class 1 1/13

Introduction to the class. And: The natural and cultural history of the Blackland Prairie. Changes in the ecosystem from the end of the Pleistocene to modern times. The need for restoration, and what will be restored. Ecological concepts.

Assignment: Read Chapter 1 in Text—Introduction

Class 2 **1/20 NO CLASS MLK DAY OBSERVED**

Class 3 1/27

Historic disturbance regimes. Fire and Grazing in the Blackland Prairie.

Field Trip: Saturday, February 1ST

Clymer Meadow Preserve/ Parkhill Prairie. General tour of intact prairie and a look at restoration sites. Discussion of levels of damaged wildland and approaches. Benchmarks for restoration: Consideration of the plant community concept and its relationship to soils.

See HO and instructions

Class 4 2/3

Edaphic effects—soil texture, chemistry and geology.

Note: Discussion of restoration sites and of end of semester projects.

Class 5 2/10

Discussion of basic concepts of wildland restoration. Test 1 review. ***End of semester project assignments made .***

Class 6 2/17

Test 1 on foregoing based on notes and assigned reading. Primarily concepts and vocabulary

Assignment: Read Chapter 2 in Text—Assessing Damage to Primary Processes (don't sweat the math, but do pay particular attention to concepts and lists)

Class 7 2/24

Discussion of basic concepts regarding assessment of damage to primary processes.

Class 8 3/3

Field Trip: Assessing primary process damage at the Clymer Meadow preserve.

Assignment: Read Chapters: 3—Repairing Damaged Primary Processes (again, don't sweat the math, but do get the concepts and lists) and 4—Directing Vegetation Change

SPRING BREAK 3/10 *Assignment: Read Chapters 5--- Selecting Plant Materials*

Class 9 3/17

Class 10 3/24

Discussion of basic concepts of material selection. *Assignment: Read Chapters 6—Site Preparation and Management and 7 in Text-- Planting*

Class 11 3/31

Field Trip: Clymer Meadow plant materials center. On ground quick course in all of the above. *Read Chapt 8 in Text—Planning Repair Programs for Wildland Landscapes.*

Class 12 4/1

Test 2 Discussion of Planning Repair Programs. Test 2 Review.

Class 13 4/7

Test 2 on foregoing based on notes and assigned reading.

Class 14 4/14

Workshop on Semester Project.

Class 15 4/21

Presentations/Semester Projects Due.

Class 16 4/28

Review for Final Exam

Class 17 5/5

Final Exam

“All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment.” See Student’s Guide Handbook: Policies and Procedures, Conduct

