WILDLIFE HABITAT ECOLOGY AND MANAGEMENT

BESC 435 (3 HR)

MWF 12:00-12:50

Instructor: Dean Ransom, Jr., PhD

Office: 212 STM

Office hours: M 1:30 – 5:00 PM

Telephone/e-mail: 886-5938; dean.ransom@tamuc.edu

This class is designed to acquaint students with the theory, concepts, and techniques used to manage habitat for wildlife on lands primarily used for wildlife production. Natural processes that influence secondary succession will be discussed in context to local or small scale applications with respect to single or targeted species and then extrapolated to larger scales of resolution to incorporate concepts of landscape fragmentation and ecology. Specific expected outcomes include an understanding of what wildlife habitat is and what habitat is not, the role of ecological succession in providing wildlife habitat, and the application of specific management techniques in restoring and maintaining quality wildlife habitat.

There is no textbook available for this class. Students will be responsible for material discussed in lecture as well as outside readings. Student grades will be based upon four lecture exams, attendance, and a group project paper/presentation. Make up exams will be allowed only with an approved university excuse. Class attendance is important to do well in this class and will be checked periodically; class attendance will also be necessary to take the exam. Exams will be a combination of definitions, multiple choice, and short answer/essay. Grades will be based on the total points earned divided by total points possible x 100%.

Lecture exams 4 @ pts each.........................400 pts.

Group project: oral presentation.....................60 pts.

written presentation.........................20 pts.

Attendance:.................................................20pts.

Obligatory statements:

Code of Conduct. 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).

Plagiarism is a criminal activity. You must cite all sources of information. Copying of material, whether parts of sentences, whole sentences, paragraphs or entire articles will result in a grade of zero for your assignment and can result in further disciplinary action. Note that this is true throughout the University
and we do have plagiarism detecting software in place. Further information for avoiding this activity will be provided with your written assignments.

**Campus Concealed Carry**

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations. For a list of locations, please refer to ([http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf](http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf)) and/or consult your event organizer. Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

**Nondiscrimination Notice**

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

**Students with disabilities:** The Americans with Disabilities Act (ADA) is 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 of their disabilities. If you have a disability requiring an accommodation, please contact: Office of Student Disability Resources and Services, Texas A&M University-Commerce, Gee Library, Room 132, (903)-886-5150, or (903)-886-5835, FAX (903)-468-8148, StudentDisabilityServices@tamu-commerce.edu.

*The instructor reserves the right to change, alter, modify, this syllabus as needed; such changes will be announced in class before hand, so as to ensure a 'no surprises' approach to the class.

**Tentative Lecture Topic**

**INTRODUCTION**

Week 1. Syllabus, Expectations, Projects

Week 2. Succession, Habitat Assumptions, Definition
   Habitat Attributes, Types, Quality, Carrying Capacity

Week 3. Edge, Useable Space, Generalists, and Specialists.

**Exam I**

**SILVICULTUREAL PRACTICES AND FOREST MANAGEMENT**
Week 6. Definitions, Forest Classification
   Even Age, Uneven Age Management
Week 7. SMZ’s, Snags, Old Growth, Cavity Management, Fire in the Woods  **Group 1 Forest Management**
Exam II

**RANGELANDS SYSTEMS AND RANGE MANAGEMENT**
Week 8. Definitions, Classification, Types
Prescribed Fire
Week 9. Livestock Grazing and Grazing Systems
Mechanical/Chemical Management  **Group 2 (Grazing), Group 3 (Fire)**
Exam III

**WETLAND MANAGEMENT AND ECOLOGY**
Week 10. Wetland Definitions, Types, Classification
   Water Dynamics, Water Manipulations
Week 11. Moist Soil Management
   Vegetation Control  **Group 4 (Moist soil Management)**
Week 12. Forested Wetlands, Nest boxes  **Group 5 (Nest boxes for wood ducks)**
Exam IV  **(Final—not comprehensive)**

**GROUP PROJECTS**

The class will be divided up into groups of as near equal size as possible (≤ 5). Each student will participate in a group project. All students within a group have the responsibility of reporting the instructor non-participating members. Group topics will be chosen at random from a set of topics assigned by the instructor. The topics will be various habitat management practices. The design behind this is to evaluate the direct effect of management practices applied on the ground with respect to the conceptual attributes of the practice as discussed in lecture. In other words, lecture will cover the theory, but how well does the technique (e.g., prescribed fire) actually work in its application?

In order to achieve this goal, your instructor will provide you a list of peer reviewed articles addressing all the techniques covered by the projects. Groups will also find and utilize newer/current literature to incorporate into their projects. The presentation/written paper will not rehash what we have discussed in lecture (generalities, concepts), but will actually illustrate the performance of the techniques as described and tested in the published literature. The use of power point will be required for the class presentation; in addition, a short written summary (20 pts, ≤ 5 double spaced pages) will be turned in on the day of the presentation. Presentations will be timed to coincide with the lecture topic being covered.