

COURSE SYLLABUS

REWM 4750/5750 – Wildlife Habitat Restoration Ecology Spring Semester 2017

TR 2:45-4:00 PM, AG 2018

Instructor Information:

Jeffrey L. Beck

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Office Hours: W 10:00 AM–2:00 PM and TH 11:00 AM–1:00 PM (or by appointment)

Prerequisites:

REWM 4330 (Rangeland Ecosystem Assessment and Monitoring) and 4850 (Rangeland Vegetation Management Techniques) are required prerequisites for REWM 4750. Undergraduate students lacking these courses, but familiar with ecological principles central to wildlife habitat ecology may gain admittance to 4750, through instructor consent.

Course Description:

Wildlife Habitat Restoration Ecology is designed to provide students with knowledge and skills to restore and monitor wildlife habitats that have undergone restorative activities. Although the course will overview theoretical concepts that are applicable to many systems there will be a focus on applications to wildlife habitats in western North America. A primary goal for the course is for students to prepare critically written summaries and a restoration project plan, which synthesize literature and thought on contemporary topics. Class lectures will assist students in preparing their summaries and plans.

Disability Statement:

If you have a physical, learning, or psychological disability and require accommodations, please let me know as soon as possible. You must register with, and provide documentation of your disability to University Disability Support Services (UDSS) in SEO, room 330 Knight Hall.

Objectives/Outcomes/Standards:

Course Objectives

1. To learn how habitat and population concepts are applied to restoration of wildlife populations
2. To become familiar with habitat terminology and relationships to habitat restoration
3. To become familiar with the methodology used to restore and monitor wildlife habitats
4. To learn how restoration plans for wildlife are developed and implemented
5. To encourage an interest in further learning about wildlife habitat restoration ecology

Student Responsibilities

1. Participate fully in all exercises
2. Complete assignments on time
3. Read assigned material and complete written assignments before coming to class
4. Be enthusiastic about learning – ask questions!
5. Get to know your instructor and others in the class

Classroom Policies

1. Students are expected to: be on time, read journal articles and book chapters before coming to class, and participate in class discussions and activities
2. Academic honesty and integrity are University Policies. Failure to maintain these standards may result in a failing grade and/or referral to the Dean of students
3. Derogatory language or behavior based on race, gender, religion, political affiliation, sexual orientation, or physical or mental abilities is not appropriate for class

Text(s) and Readings:

Required Textbook (I will post chapters when relevant to lectures throughout the semester)

Morrison, M. L. 2009. Restoring wildlife: Ecological concepts and practical applications. Island Press, Washington, D.C., USA.

Additional Resources

Falk, D. A., M. A. Palmer, and J. B. Zedler, editors. 2006. Foundations of restoration ecology. Society for Ecological Restoration International. Island Press, Washington, D.C., USA.

Monsen, S. B., R. Stevens, and N. L. Shaw, compilers. 2004. Restoring western ranges and wildlands. General Technical Report RMRS-GTR-136-vol-1. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fort Collins, Colorado.. Pages 1–294 plus index.

Monsen, S. B., R. Stevens, and N. L. Shaw, compilers. 2004. Restoring western ranges and wildlands. General Technical Report RMRS-GTR-136-vol-2. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fort Collins, Colorado. Pages 295–698 plus index.

Monsen, S. B., R. Stevens, and N. L. Shaw, compilers. 2004. Restoring western ranges and wildlands. General Technical Report RMRS-GTR-136-vol-3. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fort Collins, Colorado. Pages 699–884 plus appendices and index.

Morrison, M. L., B. G. Marcot, and R. W. Mannan. 2006. Wildlife-habitat relationships: concepts and applications. Third edition. Island Press, Washington, D.C., USA.

Whisenant, S. G. 1999. Repairing damaged wildlands: a process-oriented, landscape-scale approach. Cambridge University Press, Cambridge, United Kingdom.

Course Requirements/Assignments:

Grading Standards

Grades will be assigned on the basis of percentage of total points earned. Extra credit points may be available, and may tip the scale for border-line grades (within 1% of the higher grade). *Graduate students have additional responsibilities to write a section in an article on wildlife habitat restoration for a scientific journal **and** to participate as group leaders for writing the 2-page summaries and restoration plan to earn their grade.*

- A = >90%
- B = 80–89%
- C = 70–79%
- D = 60–69%
- F = <59 %

Undergraduate Students (REWM 4750)

Assignment	Number	Point Value	Total Points
Participation	1	50	50
First exam	1	100	100
Second exam	1	100	100
Third exam	1	100	100
2-page summaries	3	25	75
Sage-grouse lek visit	1	25	25
Restoration plan and presentation	1	100	100
Total			550

Graduate Students (REWM 5750)

Assignment	Number	Point Value	Total Points
Participation	1	50	50
First exam	1	100	100
Second exam	1	100	100
Third exam	1	100	100
2-page summaries	3	25	75
Sage-grouse lek visit	1	25	25
Restoration plan and presentation	1	100	100
Leadership on writing assignments	1	150	150
Total			700

Late Assignments

Written assignments are due at the beginning of class on assigned due dates. Assignments will lose a half letter grade if submitted later that day, and will not be accepted more than 1 day past the due date. However, I can make accommodations for valid emergencies.

Attendance/Participation Policy:

1. Absences result in poor performance on assignments and exams, so please attend each class
2. University sponsored absences are cleared through the Office of Student Life
3. Other absences must be cleared through me

Academic Honesty:

The University of Wyoming is built upon a strong foundation of integrity, respect and trust. All members of the university community have a responsibility to be honest and the right to expect honesty from others. Any form of academic dishonesty is unacceptable to our community and will not be tolerated. [from the UW General Bulletin http://www.uwyo.edu/registrar/university_catalog/honor.html]. Teachers and students should report suspected violations of standards of academic honesty to the instructor, department head, or dean. Other University regulations can be found at: <http://www.uwyo.edu/generalcounsel/new-regulatory-structure/index.html>)

Guest Speaker Tentative Schedule:

Date	Speaker	Affiliation	Topic
Feb 9	Dr. Pat Diebert	USFWS	Endangered Species Act
Mar 21	Bill Rudd	Wyoming Migration Initiative	Wyoming Migration Initiative
Monday, Apr 3	Dr. Dan Thompson	WGFD	Grizzly Bear Reintroduction

Course Outline:

Tentative Schedule		
Week	Topic	Assignment*
1 (Jan 24 and 26)	Conservation History: Operating Concepts; Restoration Plan Overview	
2 (Jan 31 and Feb 2)	<i>SRM Meeting in St. George, UT – No Class</i>	
3 (Feb 7 and 9†)	Population and Meta-population concepts; Endangered Species Act	
4 (Feb 14 and 16)	Captive breeding and Augmenting populations	Summary 1; 1-page paragraph of Restoration Plan (Feb 16) Exam 1 (Feb 23)
5 (Feb 21 and 23)	Introduced/Exotic species	
6 (Feb 28 and Mar 2)	Animal Movement	
7 (Mar 7 and 9)	Habitats and Habitat treatments	Summary 2
8 (Mar 14 and 16)	<i>Spring Break – No Class</i>	
9 (Mar 21 and 23)	Assemblages/Assembly rules	
10 (Mar 28 and 30)	Disturbance ecology	First Draft Restoration Plan (Mar 28); Exam 2 (Mar 30)
11 (Apr 4 and 6)	Desired conditions, Restoration design concepts	Summary 3: Grouse lek (Saturday, Apr 8) *Grouse lek (Saturday, Apr 15)
12 (Apr 11 and 13)	Restoration design concepts	
13 (Apr 18 and 20)	Habitat mitigation	
14 (Apr 25 and 27)	Population and habitat monitoring	
15 (May 2 and 4)	<i>Group Presentations</i>	Restoration Plan; Exam 3
16 (May 9)	<i>Final Exam – Tuesday, May 9 (3:30–5:30 PM)</i>	<i>If necessary (Exam 3)</i>

†Guest speaker (see schedule).

*If needed.