

REWM 4580/5580 - Rangeland Restoration Ecology

Spring 2013 Course Syllabus

Time and location:

MWF 10:00-10:50 EN 3114

Instructor:

Dr. Kristina Hufford
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Course Information:

Description: Intensive analysis of basic and applied ecological principles involved in the restoration of degraded lands in the American West and around the world, with primary emphasis on vegetation and vegetation influences. Strong emphasis on current research.

Objectives: The objective of this course will be to learn concepts, theories, and practices relevant to rangeland restoration. This course requires **synthesis** of vegetation, soil, and ecosystem ecology disciplines, which students will apply in reading, writing, and presentation exercises throughout the semester.

Textbooks and other resources:

Required

Clewell, A. and J. Aronson. 2008. Ecological Restoration: Principles, Values, and Structure of an Emerging Profession, Society for Restoration Ecology International, Island Press: Washington D.C. ISBN: 9781597261685

For books below, full text is available online as eBooks at <http://www-lib.uwyo.edu/>

Bainbridge, D.A. 2007. A Guide for Desert and Dryland Restoration, Society for Restoration Ecology International, Island Press: Washington D.C. ISBN: 9781559639699

Whisenant, S.G., 1992. Repairing Damaged Wildlands, Cambridge University Press, Cambridge. ISBN: 9780521665407

Additional references

Monsen, S.B., & N.L. Shaw, compilers, 2004, Restoring Western Ranges and Wildlands, general technical report RMRS-GTR-136: vol-1 through vol-3, U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fort Collins, CO. (available online)

Temperton, V.M., R.J. Hobbs, T. Nuttle, & S. Halle. 2004, Assembly Rules and Restoration Ecology, Society of Restoration Ecology International, Island Press, Washington D.C.

Walker, L.R., J. Walker, & R.J. Hobbs, 2007, Linking Restoration and Ecological Succession, Springer, New York.

Grading scale and assignment descriptions:

	<u>Points Available</u>
	4580/5580
Participation	20/20
Discussion Leadership	25/30
Homework and In-class Assignments	40/50
Exam 1	100/100
Exam 2	100/100
Field Assessment Term Project	125/135
Field Assessment Presentation	0/25
Total	410/460

Participation

Students will be expected to participate in discussions, lectures, guest lectures, and in-class activities on a weekly basis. Points will be withheld for absences and general lack of participation.

Student-Lead Reading Discussions:

Teams of students will be responsible for leading a discussion relating to literature that the entire class will read. Leaders should begin the discussion with a brief summary, and may wish to incorporate information from supplemental literature. Leaders should design the discussion around 2-4 questions developed by the leadership team. The class will break up into groups to discuss the questions and the reading, finishing with a class-wide summary. Full points will be rewarded to students who actively keep the discussion moving. It is highly recommended that the discussion leaders meet with the instructor beforehand if the students have any concerns about the material.

Homework and In-class Assignments:

Homework assignments will be assigned during the semester and students may also be graded on assignments completed in class.

Field Assessment Term Project:

Before mid-semester, students will need to identify an existing degraded site or restoration project in a rangeland setting. The location will serve as a case study site that students will use for practice in site assessment and restoration plan design. At the end of the semester, students will submit a final restoration report, which describes the site, provides a complete restoration plan, including recommendations for post-restoration management and monitoring. Students enrolled in REWM 4580 will work in pairs; students enrolled in REWM 5580 will work as individuals. Students enrolled in REWM 5580 will also give a short presentation of their field assessment. Specific details about this project will be provided separately.

Exams:

There will be two exams during the semester. These exams are generally essay-style and take-home. Students will work independently on the exams and will be required to incorporate reading material, discussion material, relevant literature, and personal opinion to synthesize answers.

Student information:

Disability statement:

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

There are several online and campus resources such as the writing center, oral communications lab, library reference personnel, career center, student counseling, and websites. Please take advantage of these resources.

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. Teachers and students should report suspected violations of standards of academic honesty to the instructor, department head, or dean. Other information can be found at:

http://www.uwyo.edu/generalcounsel/_files/docs/uw-reg-6-802.pdf

Absences:

Students are expected to attend class. Excused absences need to be approved through the Office of Student Life (Knight Hall, room 128). Additional accommodations may be made with the instructor for other absences.

Classroom Etiquette:

1. Students are expected to attend class and be on time, read assigned material before coming to class and participate in class discussions and activities.
2. Please be courteous to your fellow classmates and the instructor by turning off or silencing electronic devices during class sessions.
3. 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.
4. Derogatory language or behavior based on race, gender, religion, political affiliation, sexual orientation, or physical or mental abilities are inappropriate and will not be tolerated. Please show respect for others.

*The instructor may make changes to the syllabus as the course proceeds. If necessary, these changes will be announced in class/via email.