

## Rangeland Resource Management REWM 5000

1:20- 2:30 T&Th Ag 22

Dr. Ann Hild available by appointment via email Preferred times: Tuesday-Thursdays, 2:30 - 5:00pm  
office: AG Room 6 email [annhild@uwyo.edu](mailto:annhild@uwyo.edu) or phone 766-5471

**Suggested Readings:** many files are available on the course WyoWeb site or online as indicated below. Be sure you know how to access course files.

**Heitschmidt, R. K. & J. W. Stuth 1991.** Grazing Management: An Ecological Perspective. Timber Press. (out of print, used copies are available) Available **online** at <http://cnrit.tamu.edu/rlem/textbook/textbook-fr.html>).

**Stubbendieck, J., S. Hatch & K. Hirsch.** 2001. North American Range Plants\_ (5th ed.) Univ. of Neb. Press. (If you are a "plant person", this book is probably not necessary. For others, it is a great resource for common rangeland species which includes distribution maps and detailed line drawings.)

**Vavra, M., W. A. Laycock and R.D. Pieper.** 1994. Ecological implications of Livestock Herbivory in the West. Society for Range Management. Denver, CO. 297 pp.

### **Other helpful resources:**

Gibson D. J. 2009. Grasses and grassland ecology. Oxford Univ. Press.

Holechek, J., R. Pieper, and C. Herbel. 1998. Range Management. Many editions available.

Forum: Grazing Theory and Rangeland Management. 1993. Ecological Applications 3(1):1-38.

Herrick, J. E., J. W Van Zee, K M. Havstad, L. M. Burkett and W. G. Whitford. 2005. Monitoring Manual for grassland, shrubland and Savanna ecosystems. Vols. 1 & 2. USDA-ARS Jornada Experimental Range. Las Cruces, New Mexico. [http://usda-ars.nmsu.edu/JER/Monit\\_Assess/monitoring\\_main.php](http://usda-ars.nmsu.edu/JER/Monit_Assess/monitoring_main.php)

National Research Council. 1994. Rangeland Health. Academic Press.

National Research Council. 1984. Developing Strategies for Rangeland Management. Westview Press. Boulder.

Pellant, M, P. Schaver, D. Pyke, and J. E. Herrick. 2005. Interpreting indicators of rangeland health. V. 4. USDI-BLM. Technical Reference 1734-6. Online at [www.blm.gov/nstc/library/techref.htm](http://www.blm.gov/nstc/library/techref.htm)

Society for Range Management (SRM). 1998. Glossary of Terms Used in Range Management. (4th ed.)

Vallentine, J. 1990. Grazing Management. Academic Press.

**Course description:** In the framework of ecologically sound management, students will develop an understanding of major N. American rangeland ecosystems, and domestic livestock uses of these rangelands. We will examine influences of herbivory on rangeland vegetation and discuss commonly used grazing management systems. We will discuss current theory and historic approaches to assessing rangeland condition and current management issues. The course will initially be more lecture, until you have more basic knowledge of rangeland systems, plant components and herbivores. Then, as the semester progresses, we should have fun discussing the readings and considering important concepts for management of rangeland resources.

**Attendance:** Your presence in class is expected. Please notify me **in writing (email works best)**, in advance, if you need to miss class. If you miss class, please keep up with readings and consult with your peers in the class about discussions you missed. Please inform me if you require special assistance in order to attend this class.

**Grading:** Grading will be based upon both an understanding of topics covered during the semester and upon your ability to communicate your knowledge in writing and discussions. There are two papers, a plant id quiz, and a final. More detailed assignment descriptions will be provided. Grading is based entirely upon points attained and will not be curved. Late papers will be penalized one point daily.

2 Paper assignments	200	Based upon course readings
Plant ID quiz	100	
<u>Final paper</u>	<u>100</u>	comprehensive synthesis of all materials
Total points	400	

**Field trips.** Field trips for this class are arranged based upon the interest and experience of the students. **We will discuss the field trip plans together to determine interest and timing of trips.** Some class meetings will be cancelled during the semester, to compensate you for time spent on field trips.

**Plant identification quiz:** You will be asked to identify common rangeland grasses, forbs and shrubs. On the test, you will be asked the common name of mounted specimens and must match it with the scientific name, whether plants are annual or perennial, and native or exotic. You will have instruction on plant id and mounted specimens to study. Approximately 40 of the plants on your list can be found within 50 miles of Laramie.

**Final Exam.** The exam topics will include all items we have covered in class: your knowledge of different range ecosystems, exotic invasions, grazing systems and terminology. The final will be comprehensive, and will ask you to synthesize the lecture, discussions and readings. You will be asked to apply concepts to specific resource management issues. You will be given example questions prior to the final exam.

**Writing assignments.** Two paper assignments are used to cover concepts contained in readings and lectures on defoliation, and range condition assessment. The papers should be formatted following scientific journal style. Paper assignments cover specific details on your readings, theoretic implications and their applications. Writing assignments will be discussed in more detail as paper deadlines approach. **Page limits are for text** and do not apply to title pages, references, figures, and accessory pages. Late paper grades will be decreased one point per day late, including weekends. **Papers should be submitted electronically as a word file attachment via email . Attach a document file with the name “your last namePaper#”, as “SmithPaper1”.**

## **Guidelines for Writing Assignments**

**Format** for all papers should follow scientific style (e.g. refer to the Style Manual for Rangeland Ecology and Management (available online and in the library). You are writing a **synthesis paper** rather than a research report (styles are demonstrated in recent issues of this journal). **Double space lines.** Number pages and put your last name in the footer.

**1. Use topic headings** to divide your paper into sections. The assigned questions may be answered in any order. Beyond that general format, you should arrange the answers to the questions in a way that makes most sense for you and which flows well from one topic to another. You will have to read all assigned papers in order to write complete answers for the questions. Please keep the font large enough to read easily.

2. Whenever possible, use **specific, detailed examples** of plant and animals and ecosystems to illustrate your points and to be exact.

3. Use **author & year citations** in the text and literature cited at the end (not numbered references).

4. **Not more than 5 pages of text** excluding references (less than 2000 words).

5. **Email me an electronic copy** on the due date, and **hand in a hard copy** in class.