Natural Resources Conservation and Management - NRM 140 Western Carolina University

"Anyone who solves the problem of water deserves not one Nobel Prize but two – one for science and the other for peace." President John F. Kennedy

Fall 2012 - 149 Stillwell Building Lectures: Monday, Wednesday, and Friday 8:00 - 8:50 AM

Professor: Dr. Brian Kloeppel, 307 Stillwell Building, bkloeppel@wcu.edu, 828-227-2888 Office Hours: Monday 12:15-1:15 PM, Wednesday 8:50-9:50 AM, and by appointment

I. Rationale/Purpose

The conservation and management of natural resources includes both an understanding of natural resources and balancing their values. These resources will include water, soil, vegetation, wildlife, rangeland, and light. We will examine biotic and abiotic resources, their measurement, potential management options for these resources, and their economic impacts with discussions, field trips, data collection and summaries, group activities, readings, and case studies.

II. Course Aims and Objectives:

Aims

The aims of this class include introducing the concepts and values involved in natural resource management. The tools and techniques used to accomplish the conservation goals will also be presented.

- By the end of this course, students will:
 - o Know the difference between resource conservation, preservation, and restoration.
 - Know the major natural resources and some of the policies and goals that govern their management.
 - Know some of the techniques involved in resource quantification, diversity, extinction surveys, and analyses.
 - Understand the considerations involved in developing sustainable harvest plans for a variety of natural resources.
- Demonstrate an understanding and appreciation of the need, value, and effort involved in natural resource conservation and management.
- Liberal Studies learning goals:
 - o Demonstrate the ability to locate, analyze, synthesize, and evaluate information;
 - Demonstrate the ability to interpret and use numerical, written, oral, and visual data;
 - Demonstrate the ability to read with comprehension, and to write and speak clearly, coherently, and effectively as well as to adapt modes of communication appropriate to an audience:
 - Demonstrate the ability to critically analyze arguments;
 - Demonstrate the ability to recognize behaviors and define choices that affect lifelong wellbeing;
 - Demonstrate an understanding of
 - Past human experiences and ability to relate them to the present;
 - Different contemporary cultures and their interrelationships;
 - Issues involving social institutions, interpersonal and group dynamics, human development and behavior, and cultural diversity;
 - Scientific concepts and methods as well as contemporary issues in science and technology;
 - Cultural heritage through its expressions of wisdom, literature and art and their roles in the process of self and social understanding.
- Demonstrate an excitement for and love of learning

III. Course Materials

Course readings:

- Required Text: Environmental Land Use Planning and Management By John Randolph; Island Press. 2004. 664 pages. ISBN 1-55963-948-2. 1-9781559639484
- I will post resources to the course Blackboard page as the semester continues. Please learn how to access these resources.

IV. Faculty Expectations of Students/Course Policies

Statement on Accommodations for students with disabilities:

Western Carolina University is committed to providing equal educational opportunities for students with documented disabilities and/or medical conditions. Students who require reasonable accommodations must identify themselves as having a disability and/or medical condition and provide current diagnostic documentation to Disability Services. All information is confidential. Please contact Disability Services for more information at (828) 227-2716 or lalexis@wcu.edu. You can also visit the office's website: http://www.wcu.edu/12789.asp

• Statement on Academic Integrity (including plagiarism): Academic Honesty Policy

Western Carolina University, as a community of scholarship, is also a community of honor. Faculty, staff, administrators, and students work together to achieve the highest standards of honesty and integrity. Academic dishonesty is a serious offense at Western Carolina University because it threatens the quality of scholarship and defrauds those who depend on knowledge and integrity. Academic dishonesty includes:

- a. **Cheating**—Intentionally using or attempting to use unauthorized materials, information, or study aids in any academic exercise.
- b. Fabrication—Intentional falsification of information or citation in an academic exercise.
- c. **Plagiarism**—Intentionally or knowingly representing the words or ideas of someone else as one's own in an academic exercise.
- d. **Facilitation of Academic Dishonesty**—Intentionally or knowingly helping or attempting to help someone else to commit an act of academic dishonesty, such as knowingly allowing another to copy information during an examination or other academic exercise.

Instructors have the right to determine the appropriate sanction or sanctions for academic dishonesty within their courses up to and including a final grade of "F" in the course. Within 5 calendar days of the event the instructor will inform his/her department head, and the Associate Dean of the Graduate School when the student is a graduate student, in writing of the academic dishonesty charge and sanction.

Please refer to the student handbook regarding the policies and consequences of academic honesty at Western Carolina University.

• Statement on late and/or makeup assignments

Exams can only be made up if I am contacted at least by the day before the exam (before 4 PM) and the student has a legitimate excuse for missing the exam. Assignments receive a 15% reduction for each day late and receive a '0' if they are more than three days late.

Statement of expectations for attendance and participation

I expect students to be in class and actively participating in discussions and activities. I may call on you to offer an answer, your opinion, or some insight. Student teams will develop their rules and consequences for not participating on the first and second day of class.

• Statement of classroom behavior

Please, no texting during class. We want to create an environment of mutual respect where students can feel able to contribute and learn. We will frequently be surveying the class for opinions, options, debates, and values regarding natural resources. It is important that we respect

the opinions of all and that we value the diversity of a range of beliefs when discussing conservation and management. Anything that distracts us from this goal is not acceptable and will be discussed with the offending student(s).

Statement of weather policy

If the University closes for inclement weather, class will be canceled. If there is another reason to cancel class, then I will notify everyone by email.

V. Grading Procedures:

Description of Item	Percentage of Grade
Exam I	20%
Exam II	20%
Final Exam	20%
Homework, Projects, Activities	20%
Attendance	20%
Total	100%

Letter grades will be assigned according to the following:

Percentage Grade	Letter
90-100	A
80-89	В
70-79	С
60-69	D
59 and lower	F

Plus (+) and minus (-) grades will be assigned to the highest and lowest two points of each grade category (e.g. 99 and 100 = A+, 90 and 91 = A-, 88 and 89 = B+, 80 and 81 = B-, etc.). The grades of A+, A, A-, B+, B, B-, C+, C, C-, D+, D, D- and F indicate gradations in quality from Excellent to Failure. Please note that a C- grade is less than satisfactory and many not meet particular program and/or course requirements.

Attendance: Attendance at all class periods is expected. More than 2 absences will result in a 90% attendance grade, more than 4 absences will result in a 80% attendance grade, more than 6 absences will result in a 70% attendance grade, more than 8 absences will result in a 60% attendance grade, more than 10 absences will result in a 50% attendance grade, etc.

Composition-Condition Marks. A student whose written work in any course fails to meet acceptable standards will be assigned a composition-condition (CC) mark by the instructor on the final grade report. All undergraduates who receive two CC grades prior to the semester in which they complete 110 hours at Western Carolina University are so notified by the registrar and are required to pass English 300 or English 401 before they will be eligible for graduation. This course must be taken within two semesters of receiving the second CC and must be passed with a grade of C (2.0) or better.

VI. Course Evaluations:

 Online course evaluations for this course will be open from approximately 11 November 2012 to 07 December 2012.

VII. Tentative Course Schedule

May change to accommodate guest presenters, student needs, weather for field events, and meetings.

Day / Date	Topic	Reading Assignment
M, 20 August	Introduction, Terminology, Teams	
W, 22 August	Human - Environment Interactions	Chapter 1: pages 3-15
F, 24 August	Scientific Methodology	
M, 27 August	Water Resources	Chapter 13: pages 363-413
W, 29 August	Water Resources - field activity	· · · ·
F, 31 August	Water Resources	
M, 03 September	Labor Day - no class	
W, 05 September	Water Treatment - field trip (tentative)	
F, 07 September	Project Presentations	
M, 10 September	Project Presentations	
W, 12 September	Review	
F, 14 September	First Mid-Terr	n Exam
M, 17 September	Forest Resources	Chapter 16: pages 509-554
W, 19 September	Kloeppel out - no class	
F, 21 September	Kloeppel out - no class	
M, 24 September	Forest Resources	
W, 26 September	Forest Resources - field activity	
F, 28 September	Forest Summary	
M, 01 October	Project Presentations	
W, 03 October	Project Presentations	
F, 05 October	Kloeppel out - no class	
M, 08 October	Soil Resources	Chapter 12: pages 317-362
W, 10 October	Soil Resources - field activity	
F, 12 October	Soil Resources	
M, 15 October	Fall Break - no class	
W, 17 October	Fall Break - no class	
F, 19 October	Fall Break - no class	
M, 22 October	Rangeland / Wildlife Resources	Castillon: chapter 10 (online)
W, 24 October	Wildlife Resources / Review	Chapter 17: 555-589
F, 26 October	Second Mid-Term Exam	
M, 29 October	Sustainability	Chapter 6: 106-139
W, 31 October	Sustainability	•
F, 02 November	Sustainability - field trip (tentative)	
M, 05 November	Solar Power	
W, 07 November	Solar Power	
F, 09 November	Ocean Resources	
M, 12 November	Ocean Resources	
W, 14 November	Biodiversity	Chapter 17: 555-589 (again)
F, 16 November	Biodiversity	
M, 19 November	Extinctions	Weddell: chapter 8 (online)
W, 21 November	Thanksgiving Break - no class	
F, 23 November	Thanksgiving Break - no class	
M, 26 November	Ecosystem & Watershed Manage.	Chapter 10: 244-272
W, 28 November	Habitat Management	
F, 30 November	Fire Ecology	
M, 03 December	Fire Ecology	
W, 05 December	Lecture Topic: student's choice	
F, 07 December	Review	

Final Exam: Monday, 10 December 2012, 8:30 to 11:00 AM