

Soil Conservation - NRM 320 Western Carolina University

"The nation that destroys its soil destroys itself."

Franklin D. Roosevelt

Spring 2012

Lectures: Monday and Wednesday 10:10-11:00 AM 155 Stillwell

Labs: Wednesday 1:25 to 3:20 PM 155 Stillwell

Instructor: Brian Kloeppe, 307 Stillwell Building, bkloeppe@wcu.edu, 828-227-2888

Office Hours: Tuesday 1:20-2:20 PM, Wednesday 9:00-10:00 AM, and by appointment

I. Rationale/Purpose

The purpose of this course is to familiarize students with the complex of factors important in the maintenance, enhancement, and analysis of soil resources for environmental management and productivity.

II. Course Aims and Objectives:

- **Aims**
The aims of this course are to introduce, discuss, analyze, evaluate, and predict the impact of soil management, conservation, and restoration on ecosystem health and productivity.
- *By the end of this course, students will:*
 - Understand the value and intensity of soil resource usage and productivity locally, nationally, and internationally
 - Understand the process and impact of water, wind, and other contributing factors to soil erosion and long-term productivity
 - Know and recommend soil conservation strategies and structures for maintaining and restoring ecosystems impacted by soil erosion
 - Appreciate the value of soil and water conservation and the value of maintaining and restoring water resources
- Demonstrate an excitement of learning, understanding, and appreciating the need for soil conservation and management.

III. Course Resources

- Required text: Soil and Water Conservation for Productivity and Environmental Protection, 4th edition. 2004. By Frederick R. Troeh, J. Arthur Hobbs, and Roy L. Donahue. Pearson Prentice Hall, Upper Saddle River, New Jersey. ISBN 0-13-096807-2
- I will post additional 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 the Office of Disability Services for more information at (828) 227-3886 or lalexis@wcu.edu. You may also visit the office's website: disability.wcu.edu.

- **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**

Each day that lab reports are late will result in a reduction of 15% per day. Lab reports that are more than three days late will automatically receive a zero. 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.

- **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. If you are doing a group or in-class exercise and someone is not participating in the work, please let me know so that we can make sure that everyone is doing their share to meet the stated learning goals.

- **Statement of classroom behavior**

Please turn off your cell phones. 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 resources. It is important that we respect the opinions of all and that we value the diversity of a range of beliefs when discussing natural resources. 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:

- **Weekly quizzes** are used to encourage students to keep up with the material. They will concentrate on material covered in the readings and during recent lectures and lab periods. Quizzes will start promptly at the beginning of class every Wednesday and will last approximately 10 minutes. I will drop the two lowest quiz scores. There will be no make-up quizzes for any reason.
- **Lab exercises** are intended to demonstrate and reinforce the concepts discussed in class. Labs will be conducted both inside and outside. Note that while much of the lab work will be done in teams, as a rule, each individual must submit their own *original* lab report.

V. Grading Procedures (continued):

Description of Item	Percentage of Grade
Exam I	20%
Exam II	20%
Labs	20%
Quizzes, Homework, Class Participation	20%
Final Exam	20%
Total	100%

Letter grades will be assigned according to the following:

Percentage Grade	Letter
90-100	A
80-89	B
70-79	C
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 may not meet particular program and/or course requirements.

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 01 April 2012 to 8:00 AM on 28 April 2012.

VII. Tentative Course Schedule

May change to accommodate schedules, weather due to outdoor labs, and student needs

Chapter Readings refer to course textbook: Troeh, Hobbs, and Donahue 2004

Day / Date	Lecture Topic	Reading	Lab on Wednesdays
Monday, 09 January	Introduction / Syllabus	Syllabus	Lab #1 - soil survey information
Wednesday, 11 January	Quiz #1, Historical Perspectives	Chapter 1	
Monday, 16 January	MLK Day - no class		Lab #2 - NRCS land class.
Wednesday, 18 January	Quiz #2, World Perspectives	Chapter 2	
Monday, 23 January	World Perspectives	Chapter 20	Lab #3 - water erosion
Wednesday, 25 January	Quiz #3, Water Erosion	Chapter 4	
Monday, 30 January	Wind Erosion	Chapter 5	Lab #4 - soil loss estimates
Wednesday, 01 February	Quiz #4, Predicting Soil Loss	Chapter 6	
Monday, 06 February	Soil Loss / Review		Lab #5 - USLE
Wednesday, 08 February	Exam 1		

Day / Date	Lecture Topic	Reading	Lab on Wednesdays
Monday, 13 February	Cropping Systems	Chapter 8	Lab #6 - drainage measure.
Wednesday, 15 February	Quiz #5, Cropping Systems		
Monday, 20 February	Tillage Practices	Chapter 9	Lab #7 - riparian structure
Wednesday, 22 February	Quiz #6, Tillage Practices		
Monday, 27 February	Conservation Structures	Chapter 10	Mid-Term Break - no lab
Wednesday, 29 February	Mid-Term break - no lecture		
Monday, 05 March	Conservation Structures		Lab #8 - stream structure
Wednesday, 07 March	Quiz #7, Veget. Disturb. Areas	Chapter 11	
Monday, 12 March	Forestland Management	Chapter 12	Lab #9 - forest field trip
Wednesday, 14 March	Quiz #8, For. Manage. / Review		
Monday, 19 March	Exam 2		Kloeppel in DC ??? - no lab
Wednesday, 21 March	Kloeppel in DC ??? - no lecture		
Monday, 26 March	Water Conservation	Chapter 13	Lab #10 - recovery methods
Wednesday, 28 March	Quiz #9, Water Quality	Chapter 17	
Monday, 02 April	Spring Break - no lecture		Spring Break - no lab
Wednesday, 04 April	Spring Break - no lecture		
Monday, 09 April	Wetlands	Chapter 14	Lab #11 - wetlands
Wednesday, 11 April	Quiz #10, Wetlands		
Monday, 16 April	Economics of Conservation	Chapter 18	Lab make-up due to weather
Wednesday, 18 April	Quiz #11, Coastal / Beach Man.		
Monday, 23 April	Student Choice Lecture		no lab
Wednesday, 25 April	Quiz #12, Review for Final		

Lab reports will be due Monday at lecture following the lab on Wednesdays.

Final Exam: Wednesday, 02 May 2012, 8:30 - 11:00 am