

NRM 5327 Soils

Instructor:

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Course description:

An advanced overview of soil science and soil management. This course will include soil taxonomy, physical properties, nutrient cycling, carbon cycling, and soil moisture principles and management.

This is an online course. The best way to contact me is through email. When sending me an email you must put **NRM 5327** or **Soils** in the subject line. This is the only way to guarantee that your email is read and does not get lost in my other email. I will also be in my office with office hours Tuesday and Thursday 10:00-12:00 or by appointment if you would like touch base with me in person.

Class meetings:

Lecture: Web based course: No class meeting times. To access blackboard, go to the Sul Ross home page at www.sulross.edu. Go to the My SRSU tab on the SRSU homepage and select Blackboard. Enter your user name and password. This is the same user name and password you use to access Sul Ross email. Log in to the system. You should then see a screen that welcomes you by your first name and lists your classes that have blackboard support. Select Soils and you are in the class. I would suggest you click on each button and familiarize yourself with all the contents before starting the class. You can email me and other class members through blackboard.

Objectives

1. Students will be able to state the importance of soils in ecosystems
2. Students will be able to understand the important physical and chemical characteristics of the soil.
3. Students will be able to understand soil taxonomy
4. Students will be able to integrate the knowledge of soil characteristics into other areas such as conservation, farming, and range management.

Student Learning Outcomes for the M.Ag. in Natural Resource Management.

Students will be able to apply statistical concepts and procedures to natural resource data.
Students will be able to evaluate literature and references as they apply to the natural resource field

Students will be able to demonstrate their knowledge of the fundamentals and advanced concepts of range and wildlife management.

Course Outline:

- A. Introduction: What is soil and Why is it important?
- B. Physical Properties of Soils
- C. Soil Parent Materials and Soil Formation
- D. Soil Classification
- E. Soil Water
- F. Soil Aeration and Temperature
- G. Soil Chemistry
- I. Organic Matter and Soil Biota
- J. Soil Nutrients and Management
- F. Soil Erosion and Conservation

Required Text:

The Nature and Properties of Soils 14th edition; Nyle C. Brady and Ray R. Weil
Horton Hears a Who; Dr. Suess
National Geographic September 2008; Where Food Begins. Available through a digital subscription for \$12.00 for one year. <http://www.nationalgeographic.com/digitalaccess/>

Class Organization:

This course is web based with no formal meeting times. This means that it is up to you to schedule your time to meet the requirements of this course. You should plan on spending at least 2 hrs each day on the class so that you can learn the material and complete the class.

No late assignments will be accepted.

Cheating on an exam or assignment will result in an F for that material and possibly expulsion from the class with a grade of F.

It is SRSU policy to provide reasonable accommodation to students with disabilities. If you would like to request such accommodations because of physical, mental, or learning disability, please contact the ADA Coordinator for Program Accessibility.

Grades

Notes and Readings Activities and Discussion:	100 points
These will be discussion and journal type activities related to readings	
At Home Laboratory Exercises	100 points
These will be hands on exercises that will help you describe a specific soil and will help tie into your final project	
Semester long soil characterization and process Project	100 points
This will be a 4'X4' poster (submitted a pdf not printed) about a local soil that you select.	

Grade assignment:

$<60 = F$; $60-69 = D$; $70-79 = C$; $80-89 = B$; $90-100 = A$;