
Soils: NRM 2305

Sul Ross State University
Syllabus: Online Fall 22



INSTRUCTOR

Dr. Bonnie J. Warnock

COURSE MEETING TIMES

This is an asynchronous course with no formal meeting times.

COMMUNICATION EXPECTATIONS & OFFICE HOURS

Please use the **Virtual Office Discussion Forum** for issues related to the Online Soils Blackboard (Bb) course, its contents or activities. Because we subscribe to this forum, an email will be sent to us. I will respond within 24 hours during the work week and are available Monday through Friday 8–5. If you reach out during the weekend, I will respond as soon as possible, but please expect a delayed response. Web meetings are available on Tuesday at 4:00 and Thursday at 8:00 and by appointment.

Please use the **Blackboard Help Desk** for issues related to technical problems with BB.

TEXT BOOK

Required: **Elements of the Nature and Properties of Soils 3rd Edition** by Nyle C. Brady and Ray R. Weil. This book is available on both RedShelf and VitalSource.

Recommended: If you are interested in learning more about Soil, these are great for more in-depth reading

- Dirt: The Erosion of Civilizations, David R. Montgomery
- The Soil Will Save Us, Kristin Ohlson
- Building Soil: A Down to Earth Approach, Elizabeth Murphy

COURSE DESCRIPTION

Welcome to Soils! My name is Dr. Bonnie Warnock and I'll be working with you this semester to help you gain an appreciation for the soil. I am really passionate about Soils and my doctorate focused on reclaiming soils that had been damaged. It can be a very dry and dusty topic (yes the pun was intended...first eye roll professor joke of the semester!). So why should you take a course in something that looks sooo uninteresting? At first glance the soil is just there, we walk on it and we take it for granted. People call it dirt, and soil scientists find this a derogatory 4 letter word and react like your grandma would if you said a 4 letter word in church. There has been a history of abuse and misunderstanding of how the soil functions and what it takes to keep it healthy and productive since the dawn of agriculture and human settlement. This course is an introduction to soil science. Understanding the soil is fundamental to all fields of natural resource management, conservation, and agriculture. It is also very helpful in agricultural business and real estate as many times these businesses are based on the value and production ability of the soil resources. By the end of the course you should have an appreciation of the importance and complexity of soil, the ability to measure and record characteristics of the soil, and practices that can help benefit and increase soil health.

COURSE STUDENT LEARNING OUTCOMES

Students will be expected to develop the following knowledge throughout the course.

- Students will be able to state the importance of and complex roles soil plays in ecosystems.
- Students will be able to understand and quantify physical and chemical characteristics of soil.
- Students will be able to integrate the knowledge of soil conservation and health into other areas such as agronomy and range science.

Students will be expected to develop the following general marketable skills throughout the course.

- Team work: Students will develop team work through small group interaction and a compare and contrast section of the soil lab analysis.
- Communication: Students will improve communication skills through group discussions and written lab reports.
- Quantitative and empirical skills: Students will develop quantitative skills in both lecture and lab through calculations of soil physical and chemical characteristics.
- Critical thinking: Students will practice critical thinking in soil challenges in lecture and in the application of knowledge gained in lab to specific uses for their soil sample.

PROGRAM STUDENT LEARNING OUTCOMES

The graduating student will be able to demonstrate that he/she is able to:

- Identify species of wildland plants and wildlife common to the western United States and describe their natural history.
 - Demonstrate knowledge of elements of an ecosystem
 - Communicate about natural resources and conservation both verbally and in writing
 - Conduct range and wildlife inventories in a team setting
 - Apply knowledge of elements of an ecosystem into an appropriate conservation management plan
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ADA STATEMENT

Sul Ross State University is committed to equal access in compliance with the Americans with Disabilities Act of 1973. It is the student's responsibility to initiate a request for accessibility services. Students seeking accessibility services must contact Counseling and Accessibility Services, Ferguson Hall, Room 112; Mailing address: P.O. Box C-122, Sul Ross State University, Alpine, Texas; Telephone: 432-837-8203; E-mail rebecca.wren@sulross.edu; More resources can be found at: <https://www.sulross.edu/section/2408/counseling-and-accessibility-services>

DISTANCE EDUCATION STATEMENT

Students enrolled in distance education courses have equal access to the university's academic support services, such as Smarthinking, library resources, such as online databases, and instructional technology support. For more information about accessing these resources, visit the SRSU website. Students should correspond using Sul Ross email accounts and submit online assignments through Blackboard, which requires secure login information to verify students' identities and to protect students' information. The procedures for filing a student complaint are included in the student handbook. Students enrolled in distance education courses at Sul Ross are expected to adhere to all policies pertaining to academic honesty and appropriate student conduct, as described in the student handbook. Students in web-based courses must maintain appropriate equipment and software, according to the needs and requirements of the course, as outlined on the SRSU website.

ACADEMIC INTEGRITY

“The University expects all students to engage in all academic pursuits in a manner that is beyond reproach and to maintain complete honesty and integrity in the academic experiences both in and out of their classroom. The University may initiate disciplinary proceedings against a student accused of any form of academic dishonesty, including but not limited to,

cheating on an examination or other academic work, plagiarism, collusion, and the abuse of resource materials.” —SRSU Student Handbook

Do your own work and use your own words! I am interested in what YOU know and think!

CLASSROOM ETIQUETTE

An advantage to taking an online course is a level of anonymity, which gives students the freedom to share opinions without feeling intimidated. Regardless of how bold you may feel, don't forget that a real person is on the receiving end of your emails and/or postings. Because written language can be misinterpreted, review your message and make sure it conveys precisely what you mean to say before you click 'Send' or 'Submit.' Disruptive or intimidating behavior will not be tolerated. Disruptive behavior is defined as anything that prevents students from learning and/or prevents the professor from teaching. Especially in discussion forums, participants must be courteous and respectful. To respectfully disagree without contempt is a life skill that will serve you well in the future. You have the right to disagree with others, but you are to do so diplomatically.

ASSIGNMENT SUBMISSION MAKEUP POLICY

Turn work in on time! If you have a specific circumstance that prevents you from submitting an assignment on time, reach out as soon as possible. If you have a valid reason, you can submit work late, but 10% will be deducted for each day. No work will be accepted more than 1 week late.

GRADES & DETERMINING YOUR COURSE GRADE

The Bb Grade Center defaults to Calculate as Running Total. The system does not tabulate final course grades until students complete all assignments. Rather than emailing instructors to ask for your grade, you could view your My Grades page and tabulate current totals. If at any point in the semester you want to gauge your progress, an easy way for you to calculate a projected grade is to divide the number of points you have earned by the total number of points available in the course. This will give you your grade as it stands at a particular moment in the semester (or at least a rough estimate), and then you can calculate out the possibilities for the final grade by projecting various possible grades for the remaining assignments. Additionally, you will find it helpful to visit the My Grades page to receive feedback from Instructors... feedback via text, audio, and grade points. This information will ultimately help you evaluate your current grade and predict future outcomes.

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

ASSIGNMENTS, QUIZZES, AND DISCUSSION

Each Course Unit will have an assignment and either a quiz or a discussion. Please make sure you complete these for each course unit and submit them on time.

LAB

You will be completing a lab at home this semester. You will need to work through each lab starting with a field lab and then analyzing your soil sample. The lab will include information that you will need to submit your final project and presentation for the class. You will not be able to pass the class without successfully completing the lab. Lab instructions, videos, and links for submission of reports is found in the Labs menu button under Course Content.

GROUP WORK

For your final project/presentation you will be assigned to a group. You will be preparing your individual soil project and then will work with a group to present a compare/contrast looking at how each of your soils differed.

SCHEDULE

Week	Lecture/ Lab/ Project	Course Unit/ Lab	Assignments	Due Dates: All Due Dates @ midnight CST
Week 1: August 22- 28)	Lecture	Start Here	Intro Discussion and Syllabus Quiz (Quiz 1)	August 28
	Lab	No Lab		
Week 2: August 29- Sept. 4	Lecture	Course Unit 1: An Introduction to Soil	Quiz 2; Assignment 1	September 4
	Lab	Soil Landscape Relationships	Lab 1 Veemap	September 4

Week 3: Sept 5-11	Lecture	Course Unit 2: Soil Taxonomy	Assignment 2;	September 11
	Lab	Lab 2: Soil Survey	Lab 2: Soil Survey Discussion	September 11
Week 4: Sept 12-18	Lecture	Course Unit 3: Physical Properties	Quiz 3; Assignment 3	September 18
	Lab	Lab 3: Sample Collection, Bulk Density	Lab 3 Veemap	September 18
Week 5: Sept 19-25	Lecture	Course Unit 4: The Dynamics of Pore Space	Quiz 4	September 25
	Lab	Lab 4: Sample Morphology	Lab 4 Veemap	September 25
Week 6: Sept 26-Oct 2	Lecture	Course Unit 4: The Dynamics of Pore Space	Assignment 4	October 2
	Lab	Lab 5: Soil Texture	Lab 5 Veemap	October 2
Week 7: Oct 3-Oct 9	Lecture	Course Unit 5: Soil Chemistry	Quiz 5	October 9
	Lab	Lab 6: Soil Water	Lab 6 Veemap	October 9
Week 8: Oct 10-16	Lecture	Course Unit 5: Soil Chemistry	Assignment 5	October 16
	Lab	Lab 7: Calcium Carbonate	Lab 7 Veemap	October 16
Week 9: Oct 17-23	Lecture	Course Unit 6: Soil Carbon, OM, and Biota	Quiz 6	October 23
	Lab	Lab 8: Soil pH	Lab 8 Veemap	October 23
Week 10: Oct 24-30	Lecture	Course Unit 6: Soil Carbon, OM, and Biota	Assignment 6	October 30
	Lab	Lab 9: Soil Aggregate Stability	Lab 9 Veemap	October 30

Week 11: Oct 31-Nov 6	Lecture	Course Unit 7: Plant Nutrients	Assignment 7	November 6
	Lab	Lab 10: Soil Biological Activity	Lab 10 Veemap	November 6
Week 12: Nov 7-Nov 13	Lecture	Course Unit 7: Plant Nutrients	Quiz 7	November 13
	Lab		Individual Final Rough Draft	November 13
Week 13: Nov 14-20	Lecture	Course Unit 8: Soil Health	Assignment 8 and Soil Conservation Discussion	November 20
	Lab		Group Final Rough Draft	November 20
Week 14: Nov 21-27	Thanksgiving Holiday			
Week 15: Nov 28-30 (short week)	Final Project	Course Unit 9: Course Wrap Up	Work on Individual and Group Final Project	
Finals Week: Dec 2-8	Final Project	Course Unit 9: Course Wrap Up	Final Individual and Group Project and Presentation	December 7th