Soils: NRM 2305

Sul Ross State University Syllabus:
Online Summer 24

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 **Blackboard Message Center** for issues related to the Online Soils Blackboard (Bb) course, its contents or activities. I will get a notification and will check it each weekday. I will respond within 24 hours during the work week. 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, Wednesday, and Thursday from 1:00-6:00 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 4th Edition** by Nyle C. Brady and Ray R. Weil. This book is available from multiple sources. A link to the publisher for a rental of the e-book is included in Blackboard **Getting Started.**
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

ADA Statement

SRSU Accessibility Services. Sul Ross State University (SRSU) is committed to equal access in compliance with the Americans with Disabilities Act of 1973. It is SRSU policy to provide reasonable accommodations to students with documented disabilities. It is the student's responsibility to initiate a request each semester for each class. Students seeking accessibility/accommodations services must contact Mrs. Mary Schwartze Grisham, LPC, SRSU's Accessibility Services Director at 432-837-8203 or email mschwartze@sulross.edu or contact Alejandra Valdez, at 830-758-5006 or email alejandra.valdez@sulross.edu. Our office is located on the first floor of Ferguson Hall, room 112, and our mailing address is P.O. Box C122, Sul Ross State University, Alpine. Texas, 79832.

Distance Education Statement

Students enrolled in distance education courses have equal access to the university's academic support services, such as library resources, 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 a secure login. 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. Directions for filing a student complaint are located in the student handbook.

Academic Integrity

Students in this class are expected to demonstrate scholarly behavior and academic honesty in the use of intellectual property. Students should submit work that is their own and avoid the temptation to engage in behaviors that violate academic integrity, such as turning in work as original that was used in whole or part for another course and/or professor; turning in another person's work as one's own; copying from professional works or internet sites without citation; collaborating on a course assignment, examination, or quiz when collaboration is forbidden. Students should also avoid using open AI sources *unless permission is expressly given* for an assignment or course. Violations of academic integrity can result in failing assignments, failing a class, and/or more serious university consequences. These behaviors also

erode the value of college degrees and higher education overall. In my class, please don't use AI or your classmate/colleague/friend/parent to answer questions.

Do your own work and use your own words! I am interested in what YOU know and think, not what your friend, colleague or a chatbot has to say!

LIBRARY RESOURCES

The Bryan Wildenthal Memorial Library and Archives of the Big Bend in Alpine offer FREE resources and services to the entire SRSU community. Access and borrow books, articles, and more by visiting the library's website, library.sulross.edu/. Off-campus access requires logging in with your LobolD and password. Librarians are a tremendous resource for your coursework and can be reached in person, by email (srsulibrary@sulross.edu), or by phone (432-837-8123).
No matter where you are based, public libraries and many academic and special libraries welcome the general public into their spaces for study. SRSU TexShare Cardholders can access additional services and resources at various libraries across Texas. Learn more about the TexShare program by visiting library.sulross.edu/find-and-borrow/texshare/ or ask a librarian by emailing srsulibrary@sulross.edu.
Mike Fernandez, SRSU Librarian, is based in Eagle Pass (Building D-129) to offer specialized library services to students, faculty, and staff. Utilize free services such as InterLibrary Loan (ILL), ScanIt, and Direct Mail to get materials delivered to you at home or via email.

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, messages, 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 and share your viewpoint and expertise without contempt is a life skill that will serve you well in the future. You have the right and should probe, oppose and disagree with others (including me), but you should do so diplomatically without resorting to tactics of intimidation, harassment, or personal attack. My personal philosophy is "**Question Everything!"** I want the class environment to encourage communication, discovery, and critical reasoning.

Assignment Submission Makeup Policy

Due Dates are posted for each assignment, but I know life happens! Please make every effort to turn in assignments on time. The due dates are to help keep you on track so you don't procrastinate until the end of the class. Many of the labs require multiple days to complete. If you wait until the last day of the semester and try to blow through the class, you will fail! If you want to get done quickly, start at the first of the semester and complete at an accelerated pace. I will accept late assignments and will not penalize those late assignments. For this class the last day to turn in all assignments other than the final project is **August 11th.** The last day to submit the individual and group final projects is **August 14th.**

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;

Grade Breakdown:

Lecture 60% of grade:

Quizzes	15%
Assignments	15%
Discussions	5%
Final Individual Project	15%
Final Group Project	10%

Lab 40% of grade

Completion of Lab with photos	20%
Veemaps	20%

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 project looking at how each of your soils differed.

Schedule

Date	Part of course	Course Unit/ Lab	Assignments	Due Dates: @ midnight CST
Week 1 (July 8-14)	Lecture	Start Here	Intro Discussion and Syllabus Quiz (Quiz 1)	July 10th
	Lecture	Course Unit 1: An Introduction to Soil	Quiz 2; Assignment 1	July 14th
	Lab	Lab Prep and Site Selection		July 14th
	Lab	Lab 1: Soil Landscape Relationships	Lab 1 Veemap	July 14th
Week 2 (July 15-21)	Lecture	Course Unit 2: Soil Taxonomy	Assignment 2;	July 21st

	Lecture	Course Unit 3: Physical Properties	Quiz 3; Assignment 3	July 21st
	Lab	Lab 2: Soil Survey	Lab 2: Soil Survey Discussion	July 21st
	Lab	Lab 3: Sample Collection, Bulk Density	Lab 3 Veemap	July 21st
Week 3 (July 22-28)	Lecture	Course Unit 4: The Dynamics of Pore Space	Quiz 4 and Assignment 4	July 28th
	Lab	Lab 4: Sample Morphology	Lab 4 Veemap	July 28th
	Lab	Lab 5: Soil Texture	Lab 5 Veemap	July 28th
Week 4 (July 29-August 4th)	Lecture	Course Unit 5: Soil Chemistry	Quiz 5 and Assignment 5	August 4th
	Lecture	Course Unit 6: Soil Carbon, OM, and Biota	Quiz 6 and Assignment 6	August 4th
	Lab	Lab 6: Soil Water	Lab 6 Veemap	August 4th
	Lab	Lab 7: Calcium Carbonate	Lab 7 Veemap	August 4th
Week 5 (August 5th-11th)	Lecture	Course Unit 7: Plant Nutrients	Assignment 7 and Quiz 7	August 11th
	Lecture	Course Unit 8: Soil Health	Assignment 8 and Soil Conservation Discussion	August 11th
	Lab	Lab 8: Soil pH	Lab 8 Veemap	August 11th
	Lab	Lab 9: Soil CO2	Lab 9 Veemap	August 11th
Week 6 Short Week (August 12th-13th)	Final Project	Course Unit 9: Course Wrap Up	Work on Ind and Group Final Project	
Finals (August 14th)	Final Project	Course Unit 9: Course Wrap Up	Final Individual and Group Project Due	August 14th