

Soil Science – AGCR 1371(Hybrid) Course Syllabus: Spring 2025

“Northeast Texas Community College exists to provide personal, dynamic learning experiences empowering students to succeed.”

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Lecture Held in:

AG 117

Tue/Thur 9:30 am-10:50 am

Office Hours	Monday	Tuesday	Wednesday	Thursday	Friday	Online
	8am 9am	1:30 to 3 pm	8am 9am	1:30 to 3 pm		

The information contained in this syllabus is subject to change without notice. Students are expected to be aware of any additional course policies presented by the instructor during the course.

Course Description: 3 hours lecture and 2 hours lab each week.

Introduction to the physical, chemical, and biological properties of soils. Topics include the relationship between crops and soils, conservation of soil and water resources and the economic use of fertilizers.

Prerequisite(s): none required; helpful to your success to have had at least high school chemistry or AGRI 1314 Horticulture.

Rationale: This introductory course in soil science introduces the student to the study, management, and conservation of soils as natural bodies, as media for plant growth, and as components of the larger ecosystem. This course presents basic concepts of all aspects of soil science including; composition and genesis; physical, chemical, and biological properties; soil water; classification and mapping; soil conservation; management practices; and soil fertility and productivity (soil testing, use of fertilizers and manures, and liming). It introduces the relationships of soil to current concerns such as environmental quality and non-agricultural land use. This course should instill awareness of soil as a basic natural resource, the use or abuse of which has a considerable influence on human society and life in general. Soil is the foundation of all life and as such, a key factor in the success to agriculture operations is learning to manage them. Students can take this course as a required course in the Ag concentration section of: Certificate Level 1 and 2 Sustainable Ag and the Associates of Applied Science in Sustainable Ag. The course can also be used to fill the electives requirement in the Farm and Ranch Certificate and the AAS in Agriculture degree.

Student Learning Outcomes: Upon successful completion of this course, students will:

- List and explain the principles of soil formation and classification.
- Determine soil physical, chemical, and biological properties.
- Utilize the principles of soil and water conservation.
- Analyze and interpret soil health from soil analysis reports.
- Identify and explain the best application of soil amendments.

Lectures & Discussions:

This course will meet in the Ag Complex during posted meeting times. The course will consist of classroom lectures using multimedia presentations as well as classroom discussions in blackboard. Students are expected to review and read assigned text and materials outside of class time and be prepared for classroom discussions. Each student may choose which day of the week they want to attend from the options shown. Some farm visits/field trips may be included as needed to emphasize student learning outcomes.

Evaluation/Grading Policy:

Grades will be computed as follows:

(1) Exam:	30%
(2) Proposals	30%
Class Participation ICEV assignments	40%

Tests/Exams:

There will be 1 exams accounting for 30% of your overall grade. Exams will be multiple-choice, short answer and essays developed from text, projects and class discussions.

Proposals:

Students will be required to write and develop 2 proposals and present in class on your assigned topics. Each one will be 15% of your grade.

Class Participation/ICEV assessments:

Students will receive instructions on how to purchase access cards to complete the ICEV lessons on their site. This portion of the course will be a total of 40% of your grade.

The grading scale below will be used to determine your final grade:

Points:	Grade:
90-100	A
80- 89	B
70- 79	C
60- 69	D
BELOW 59	F

Required Instructional Materials: ICEV access card, all other materials and readings will be provided through blackboard and in class.

Minimum Technology Requirements: Students must be able to access this course and the instructions through our learning management system called blackboard. If you do not have a computer capable of operating our system you should notify your instructor so that arrangement can be made.

Student Responsibilities/Expectations:

Students are required to participate in both classroom and lab activities. Participation is 20% of the final grade and attendance is required to participate. Students are expected to sign on weekly and complete tasks on time. Late work will receive a 10 point deduction for each week that it is turned in late. Student should be courteous and treat one another with respect to allow for a peaceful and effective learning environment.

INSTRUCTIONAL RESOURCES**Required Textbook:**

ICEV online access will be needed to view and complete some assignments. I will explain the procedure in class of purchasing and getting your login.

Course Structure and Overview:**Tests/Exams:**

There will be 1 exams accounting for 30% of your overall grade. Exams will be multiple-choice, matching, short answer, true/false and essays developed from the iCEV online materials, classroom lecture and group projects. You will not be allowed to retake a test. Review for the exam will be given the

class day prior to the exam. I strongly urge you not to miss the review. If you require special accommodations and have not registered with our student advisor, Shelia Eddy, please do so before the 12th class day.

Communications: Turnaround time for email responses is 24 hours during the week and Monday following a weekend email. Email is my preferred method of communication so please read your NTCC emails.

Institutional/Course Policy:

Student Responsibilities/Expectations:

Students are required to participate in all classroom activities. Students are expected to be on time and ready to begin when classes start. Brain teasers or quizzes will be done in the beginning of each class period and students will only have the first 2 minutes to determine their answer. Points will be given for correct answers and no make-ups are available. Students may utilize bonus points on any one grade average but not your final grade. Student should be courteous and treat one another with respect to allow for a peaceful and effective learning environment.

NTCC Academic Honesty/Ethics Statement:

NTCC upholds the highest standards of academic integrity. The college expects all students to engage in their academic pursuits in an honest manner that is beyond reproach using their intellect and resources designated as allowable by the course instructor. Students are responsible for addressing questions about allowable resources with the course instructor. Academic dishonesty such as cheating, plagiarism, and collusion is unacceptable and may result in disciplinary action. This course will follow the NTCC Academic Honesty and Academic Ethics policies stated in the Student Handbook. Refer to the student handbook for more information on these subjects.

ADA Statement:

It is the policy of NTCC to provide reasonable accommodations for qualified individuals who are students with disabilities. This College will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to request accommodations. An appointment can be made with the Academic Advisor/Coordinator of Special Populations located in Student Services and can be reached at 903-434-8264. For more information and to obtain a copy of the Request for Accommodations, please refer to the special populations' page on the NTCC website.

Family Educational Rights and Privacy Act (FERPA):

The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA gives parents certain rights with respect to their children's educational records. These rights transfer to the student when he or she attends a school beyond the high school level. Students to whom the rights have transferred are considered "eligible students." In essence, a parent has no legal right to obtain information concerning the child's college records without the written consent of the student. In compliance with FERPA, information classified as "directory information" may be released to the general public without the written consent of the student unless the student makes a request in writing. Directory information is defined as: the student's name, permanent address and/or local address, telephone listing, dates of attendance, most recent previous education institution attended, other information including major, field of study, degrees, awards received, and participation in officially recognized activities/sports.

Course Calendar:

Beginning week 1: Tue 1/17/23 and ending after 16 weeks students will be instructed in 5 lessons. Each lesson will require at least 2 weeks of lecture and an exam or proposal before it is complete. The schedule may vary slightly depending on unforeseen issues. It is important to note that Spring break is

March 13-18, 2023 and campus will be closed for that week.

Lesson 1: List and explain the principles of soil formation and classification.

Lesson 2: Determine soil physical, chemical and biological properties.

Lesson 3: Demonstrate and use the principles of soil and water conservation.

Lesson 4: Analyze and Interpret soil health from soil health reports

Lesson 5: Identify and explain the best application of soil amendments.

Lesson 6: Group Project: Kiss the Ground Project ~ NTCC.