NORTHEAST TEXAS COMMUNITY COLLEGE



**Soil Science** 

AGCR 2418: Soil Science (4 credits) Course Syllabus

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# AGCR 2418: Soil Science Fall, 2017

## **Course Description:**

This course includes a study and application of production techniques and best management practices for the 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 fertilizer. This course constitutes a capstone course. Lecture/Lab/Clinical: Three hours of lecture (most on-line) and two hours of lab each week. **No assigned text. The exams and assignments will be taken from class PowerPoint's, workbooks and class notes:** 

## Workbooks and ICEV Access Card (all will be made available through blackboard):

Reference Text (not required to purchase): Building Soils for Better Crops; Sustainable Soil Management Digital copy will be available on blackboard. Additional Reference text: The Nature and Properties of Soils, 14th ed. Brady and Weil (optional). You will be required to purchase an

### **General Course Requirements:**

Class attendance is required. If you have more than three unexcused absences, you should consult with me about your grade. Anyone who wishes to withdraw from class must take the responsibility to formally drop with the Registrar; otherwise a failing grade will be given.

<b>Office Hours</b>	Monday	Tuesday	Wednesday	Thursday	Friday	Online
	Office 9-10	Office 9-10	Office 9-10	Office 9-10	JULT	N/A
Class-times	Soils 11-12:20		Soils 11-12:20	U	8 am to noon	
				1:30 to 4:00 pm		

Appointments with me may be scheduled at other times. Call for an appointment at (903) 434-8267, Office AGC 117. E-mail address: rmccracken@ntcc.edu

## **Course Objectives**

- 1. To understand the basic "language" used by soil scientists including descriptive terminology, taxonomy, and measurements of soil physical properties;
- 2. To gain an appreciation for global diversity in soil, the uniqueness of Texas soils, and how soils influence agriculture and the economy;
- 3. To consider soils as essentially a non-renewable resource and how their management can influence the environment and human health;
- 4. To understand how soils provide nutrition to plants and the role of fertilizers and fertilization in plant growth.

## Grading:

Grades will be computed as follows:

(2) Exams:	40%			
(2) Assignments – Presentations	20%			
ICEV assignments:	30%			
Final	10%			
w will be used to determine your final arade				

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

Points Grade

90-100	А
80- 89	В
70- 79	С
60- 69	D
BELOW 59%	F

#### Exams:

There will be 2 exams accounting for 50% of your overall grade. Exams will be multiple choice and essay developed from classroom PowerPoint presentations, discussion and workbook. Review quizzes will be provided each week with exams occurring as materials are covered.

#### **Assignments:**

There will be at least two presentation assignments on farms that have made improvements in their soil health. Presentations will account for 20% of overall grade.

#### **ICEV Grades:**

Students are required to purchase an access card for the ICEV online curriculum for this class located in the college bookstore. You can access those lessons and assessments via your smart phone, personal computer or NTCC computer labs or when not holding classes the Ag Complex computer classroom. You are expected to do those assignments on your own time as this is a hybrid class and we will not have time to go over them during class. The total grades in ICEV will be averaged for 30% of the course overall grade.

#### Lab Practicums:

The lab times will be conducted during class and are designed to provide students opportunities to demonstrate skill/objectives that will be learned in this class. For example: Each student will be able to evaluate a designated area of land, take a soil sample, test for soil Ph and produce and apply compost tea. These skills are a pass/fail and students must be present to demonstrate skill.

#### **Course Outline:**

#### **ADA Statement**

It is the policy of Northeast Texas Community College 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 arrange an appointment with a College counselor to obtain a Request for Accommodations form. For more information, please refer to the Northeast Texas Community College Catalog or Student Handbook.

#### ACADEMIC HONESTY POLICY

"Students are expected to complete course work in an honest manner, using their intellects and resources designated as allowable by the course instructor. Students are responsible for addressing questions about allowable resources with the course instructor. NTCC upholds the highest standards of academic integrity. This course will follow the NTCC Academic Honesty policy stated in the Student Handbook."

## Assignment #1

Open, review and print out this page of the syllabus for Soil Science. Turn in this page for your first assignment grade. Deadline to turn in will be the second full class day.

Student Name: \_\_\_\_\_

Major:\_\_\_\_\_

Purpose for taking this course:

Aspect you enjoy most about agriculture and farming?

Open and review the syllabus for soil science. Print out this page and complete and sign it to turn in the first class day. This will be your first assignment grade.

YES - I have reviewed the course syllabus and agree to the terms laid out in it.

Student name and ID

Date