

Surface and Groundwater Collection EPCT 2203

Course Syllabus: Spring 2022 F2F 8week Hybrid

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

Instructor: Mrs. Rene' McCracken

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Office	Monday	Tuesday	Wednesday	Thursday	Friday
Hours	8 am to 10 am	2 pm to 4 pm	8 am to 10 am	2 pm to 4 pm	By appointment only

This syllabus serves as the documentation for all course policies and requirements, assignments, and instructor/student responsibilities.

Information relative to the delivery of the content contained in this syllabus is subject to change. Should that happen, the student will be notified.

Course Description: 2 credit hours (two hours of lecture and one hour of lab each week.)

This is an in-depth study of operations and maintenance procedures for surface and groundwater collection.

Prerequisite(s): none

Student Learning Outcomes

Students are expected upon the completion of this course to:

- 1. Identify surface water sources
- 2. Describe water reservoir management and intake structures
- 3. Differentiate the types of wells, well hydraulics and well development
- 4. List the physical and chemical characteristics of ground water
- 5. Explain well location considerations

Evaluation/Grading Policy: Grades will be computed as follows:

(2) Exams:60%(1) Research Proposals:20%Class/Lab/blackboard Participation:20%

Tests/Exams: There will be 2 exams accounting for 60% of your overall grade. Exams will be multiple-choice, true/false, fill in the blank, short answer and essays developed from the textbook, labs, quizzes and lectures. Exams will be taken during class, should you require additional times you are required to notify instructor ahead of the exam time. The following dates are subject to change, students will be notified in advance. Only excused absences will be allowed for you to make-up an exam. An appointment must be made to take the make-up exam. Failure to take the make-up exam will result in a grade of zero.

Lab Participation: Students are required to participate in both classroom and lab activities. Students will be required to travel locally for some of the labs. Students will be expected to arrive on time and behave in a professional manner. Students are also required to dress appropriately for labs; this includes closed toed shoes, safety glasses (when required), and appropriate dress for working outdoors.

Assignments: Due dates for assignments will be provided by the instructor in class. Assignments will receive 10 points off each day they are late up to 3 days. After the 3rd day, a grade of zero will result.

Required Instructional Materials: No text required, all materials will be provided in blackboard section. **Optional Instructional Materials:** None

Minimum Technology Requirements: Students must be able to have blackboard access. Required Computer Literacy Skills: Students must be able to access information and turn in assignments in the blackboard section of this course.

Course Structure and Overview: This course will be held on Tuesday and Thursday in AGC117 from 11:00-12:20 for 8 weeks only beginning January 18 and ending Spring Break. The course will consist of classroom lectures using multimedia presentations as well as classroom discussions. All lecture materials will be in the blackboard section for this course. You will be <u>required</u> to view the lecture materials outside of class time due to the hybrid structure of this course. Labs will consist of hands on learning, demonstrations, online assignments and field trips. The lab portions of the course will be conducted as assigned on The Sustainable Market Farm in the areas consistent with course requirements.

Communications: The main way that I will contact you for this course is through your NTCC student email. You will be expected to receive messages from me through email. I will respond within a 24 hour period to requests for information sent to my email: rmcracken@ntcc.edu

Institutional/Course Policy: I will check student attendance at the beginning of each class. Students are required to attend class to participate in lab and classroom discussions. Participation is 20% of the final grade and attendance is required to participate. Students are expected to be on time and ready to begin when classes start at 11:00am. Students should be courteous and treat one another with respect to allow for a peaceful and effective learning environment. Students that are disruptive in the class will be asked to leave for the day and any assignment or activity for the time period would not be made up thereby student would receive a zero for that assignment.

Alternate Operations During Campus Closure and/or Alternate Course Delivery Requirements

In the event of an emergency or announced campus closure due to a natural disaster or pandemic, it may be necessary for Northeast Texas Community College to move to altered operations. During this time, Northeast Texas Community College may opt to continue delivery of instruction through methods that include, but are not limited to, online through the Blackboard Learning Management System, online conferencing, email messaging, and/or an alternate schedule. It is the responsibility of the student to monitor NTCC's website (http://www.ntcc.edu/) for instructions about continuing courses remotely, Blackboard for each class for course-specific communication, and NTCC email for important general information. Additionally, there may be instances where a course may not be able to be continued in the same delivery format as it originates (face-to-face, fully online, live remote, or hybrid). Should this be the case, every effort will be made to continue instruction in an alternative delivery format. Students will be informed of any changes of this nature through email messaging and/or the Blackboard course site.

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.

Tentative Course Timeline (*note* instructor reserves the right to make adjustments to this timeline at any point in the term):

- IDENTIFY SURFACE WATER SOURCES
- LIST THE PHYSICAL AND CHEMICAL CHARACTERISTICS OF GROUND WATER
 Week 1 Introduction to Water Cycle/General Terminology and Sustainable Market Farm Resources
 Week 2 Compare and Contrast Rainwater Harvesting Systems
- DESCRIBE WATER RESERVOIR MANAGEMENT AND INTAKE STRUCTURES
 Week 3 Field Trip Bob Sandlin and Compare to other reservoirs
 Week 4 Evaluate efficiency of Sustainable Market Pond as reservoir
 (EXAM 1)
- DIFFERENTIATE THE TYPES OF WELLS, WELL HYDRAULICS AND WELL DEVELOPMENT
- EXPLAIN WELL LOCATION CONSIDERATIONS

Week 5 Guest Speaker Fuller Water Wells Week 6 Water Sampling and Comparisons/Evaluations Week 7 Group Projects Week 8 (EXAM 2) not comprehensive