



**Department of Engineering Technology
Construction Engineering Technology Program
Course Policy – Spring 2023**

Title and Course Number

CET 341 – Soils and Earthwork

Credits and Contact Hours

Credits - 3 Hours Lecture

Course Meeting

This course will meet on Saturday morning, between 8:30 A.M. and 10:50 A.M. in GITC 2516 (the Engineering Department Small Conference Room). All meetings are scheduled to be held on a face to face basis.

Course Description

The study of the significant soil types and tests. Problems are investigated relating to soil mechanics, soil supported foundations for engineering structures.

The student should familiarize themselves with the Learning Management Systems that will be employed this semester. These include Canvas and WebEx. For additional information on these systems, please review:

- WebEx: <http://ist.njit.edu/wbex>
- Canvas: <https://canvas.njit.edu/>

Prerequisites and Co-Requisites

MET 237, Strength of Materials for Technology; Use of a personal computer is required.

Textbooks

Essentials of Soil Mechanics and Foundations: Basic Geotechnics (7th Edition) by [David F. McCarthy](#) , ISBN 0131145606 or 978-0131145603, 2007, Pearson

Software Requirements

The use of Microsoft software will be required throughout the course. This will include the following MS products: Word and Excel. Use of AutoCAD and Revit may also be required. All Microsoft software as well as AutoCAD and Revit are available on the NJIT website for a free download.

Academic Integrity

Academic integrity is the cornerstone of higher education and is central to the ideals of this course and this university. Cheating devalues your degree is strictly prohibited. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the Academic code of integrity policy that is found at <http://www5.njit.edu/policies/files.academic-integrity-code.pdf>.

Please be aware that it is my professional obligation and responsibility to report any academic misconduct to the Office of the Dean of Students. Any student found in violation of the code by cheating, plagiarizing or using an online software inappropriate will result in disciplinary action this action may include a failing grade of an “XF”, and/or suspension or dismissal from the University. If you have any questions concerning the Code of Academic Integrity, please feel free to contact the Dean of Students Office at DOS@njit.edu

Instructor

The instructor for this course is John A. Wiggins, P.E., P.P., J.D., F. ASCE. Professor Wiggins holds a BSCE degree (1973) from Newark College of Engineering, an MSCE degree (1981) from the New Jersey Institute of Technology and a Juris Doctor degree (1980) from the Seton Hall School of Law and is a full time member of the faculty at NJIT holding the academic rank of Senior University Lecturer. He is also the Program Coordinator for the Construction Engineering Technology (CET) and Construction Management Technology (CMT) programs at NJIT. In addition to his teaching duties, Prof. Wiggins is a practicing civil engineer. He holds Professional Engineer and Professional Planner licenses from the State of New Jersey and a Professional Engineer’s license from the Commonwealth of Pennsylvania as well as being admitted to the New Jersey State Bar. He is also a PhD candidate (ABD) in Civil Engineering at Rutgers University, New Brunswick, NJ where his principal area of study is Construction Engineering.

Oral and written communication requirements

The students will be required to produce various assignments and calculations as part of the assignments in this course. All communications between the Instructor and the student, regardless of type of communication (i.e., homework, email, calculation, oral conversation, etc.) are to be treated as professional communications. This requires that the rules of proper grammar and context be observed. Use of slang or computer shortcuts is discouraged. For instance, the proper form of address for your Instructor is “Prof.” or “Doctor”, depending on the Instructor. Unless otherwise noted, all documents will be submitted in Canvas.

Concepts and Skills (Course Learning Outcomes)

Upon completion of the course, each student will be able to:

1. Understand and apply a knowledge of soil types, composition and classis fiction including index properties and site investigation
2. Understand and apply a knowledge of engineering properties and behavior of soil deposits including the movement of water through soil, drainage, combines stresses using Mohr’s circle, subsurface stresses, settlement and shear strength theory
3. Understand and apply a knowledge of an application of Soil Mechanics theory including shallow and deep foundation design and construction, earthmoving and compaction, design and construction of unsupported slopes and earth retaining structures,

Professional Communications

All communications between the student and Instructor (homework, reports, papers, emails, etc.) are professional communications and should be treated as same. Use of slang and computer short-hand are improper and should be avoided. Also, proper grammar and spelling should be employed at all times.

Office Hours

Your Instructor is available in his office this semester during scheduled office hours. Hours will be appointment However, during office hours, social distancing and appropriate health protocols will be observed. Office Hours (starting week of January 17, 2023)

Day	Time
Tuesday	8:30 P.M – 10:00 A.M.
Friday	8:30 P.M – 10:00 A.M.

Teaching Methods

A wide variety of instructional methods are used to provide students with meaningful learning experiences. These include individual problem solving and group problem solving in addition to the traditional lecture format.

Attendance Policy/Student Conduct

The class will start promptly at 8:30 A.M.

The class will be conducted in a professional atmosphere in an effort to acquaint the students with the atmosphere of a professional environment. It is the student’s responsibility to attend class. If a class is missed, the student is responsible for all material and announcements provided during their absence. Assignments are posted on the course outline and in Canvas. Lecture attendance is not required but is strongly encouraged, and a portion of the student’s grade will be based on attendance, group tasks, and quizzes and “in-class” assignments, for which there is no “make up”. Taking the weekly quiz will also verify that the student is in attendance. However, just taking the quiz and then leaving will count as an absence. As the enrollment in this class is small, it is best if the student prepares for class each week.

The class will be conducted in a professional atmosphere in an effort to acquaint the students with the atmosphere of a professional environment. Therefore, cell phones, tablets and laptops are permitted in class for academic purposes only. This excludes emailing, text messaging and other social functions. Similarly, food is not permitted in class. A light beverage (i.e. coffee, a bottle of water, etc.) is permitted as would be in any business meeting. Hats should not be worn during class.

It is the student’s responsibility to attend class. If a class is missed, the student is responsible for all material and announcements provided during his absence. Assignments are posted on the course outline. Lecture attendance is not required but is encouraged but a portion of the student’s grade will be based on group tasks and in class assignments, for which there is no “make up”. Attendance will be taken at each class session via a sign-in sheet which will be circulated during the first 15 minutes of class. After that, any other students will be marked as not being in attendance and will not be permitted to add their name to the attendance list.

During the conduct of the class, professional courtesy is expected. This includes arriving on time as well as leaving during class, both of which can be done without disrupting the class. Similarly, “private” conversations with fellow students during a class are discourteous and inconsiderate to both your Instructor as well as your fellow students. You are encouraged to ask any questions that you feel further clarifies the material being presented or that will be to the benefit of class in general. Please feel free to ask any question at any time.

Grading Criteria

A Mid Term and a Final examination shall be administered throughout the course. Weekly quizzes, as noted on the course schedule, will also be given and counted for credit. The examinations shall cover only the material designated by the Instructor. The Final Examination shall be a comprehensive examination of all material covered during this course. It is mandatory that the Mid Term and the Final Examination be taken to successfully complete the course. It is strongly encouraged that all students make every effort to attend the examinations as make-up tests are strongly discouraged. In the event that a student fails to take the tests or the Final examination, a grade of “F” shall be entered for the student for this course. If a test is missed a makeup may be granted upon the specific approval of the Instructor and the window for the makeup is exactly one week from the original date of the test. Unless otherwise announced by the Instructor, all tests and examinations will be of the “closed notes-closed book” variety. There are no “make ups” for quizzes.

Homework assignments will be used to assess the student's progress during the course as well as to be employed to assess the quality of student's effort and understanding of the material presented. All homework shall be submitted in Canvas, graded and returned to the student as soon as possible. Homework may be covered in class as a review for the student.

Homework and other assignments are due when they are due. Late assignments will not be accepted for credit.

In the completion of homework assignments, the assignment should be logically presented with citation to reference materials properly presented. It is suggested that, whenever possible, final answers be underlined or "boxed". All assignments are due at the time posted in the assignment and the homework will be posted by the student in Canvas. Once the portal for the submission of homework is closed, the assignment will not be accepted for credit. *Similarly, late assignments will not be graded or counted for credit.*

If appropriate, computational homework may be legibly hand lettered in pencil or ink and shall be supplied on a sheet of gridded computational paper and scanned for submission. Gridded paper is available in the bookstore or at any stationary store. Written homework, when required, shall be submitted in a typed or in a word-processed format, 11 or 12 point font.

In determining the final grade for this course, all grades shall be weighted as follows:

Homework	30 %
Midterm Examination	30 %
Final Examination	30 %
Attendance/Participation	10%

Grading Scale

Letter grades will be assigned based on the following scale

A	100 - 90
B	89 – 80
C	79 – 70
D	69 – 60
F	59 - 0

The grade of Incomplete will only be granted in the case of an extreme emergency on the part of the student, proved by adequate evidence. Your Instructor reserves the right to vary the above as necessary based on the results of the course.