CIT 1230 Testing of Materials

2 Credits
1 Class Hours, 2 Lab Hours

An introduction to the standard tests used in a soils laboratory and on construction sites. Topics include identification and classification of soils and concrete properties and mix design. Labs include sieve analysis, moisture content, Atterberg Limits, hydrometer analysis, compaction, field density, concrete slump and cylinder. Corequisite(s): MATH 1000 or appropriate placement score.

Instructor Information:
Name:
Email:
Office Phone:
Office Location:
Office Hours:

Textbook and Other Materials:
Reference materials: Engineering Properties of Soils and Their Measurement, Bowles
The Portland Cement Association, Design and Control of Concrete Mixes

Course Outcomes:
Upon successful completion of this course, students should be able to:
- Determine the moisture content of a sample.
- Determine by experiment specific gravity using two methods.
- Determine the dry rodded unit weight of a gravel sample.
- Run grain-size analysis tests by the mechanical method and the hydrometer method and plot the grain-size distribution curve.
- Run the Atterberg limit tests on a cohesive soil.
- Classify soil samples according to the Unified Soil Classification System and the AASHO Classification System.
- Perform a proctor test and draw a Proctor curve.
- Perform an in place density test.
- Design concrete mixes.
- Cast concrete cylinders and test compressive strength.
• Run the air content test on concrete.
• Run the slump test on a concrete sample.
• Write a report and make an oral presentation on a topic related to the course material.

Course Assessments:
The Course Learning Outcomes will be measured by objective examinations of the theory and principles and by instructor observations of lab activities. Your performance as a team member will be evaluated based on your dependability, promptness, and cooperation as a team member. Accuracy of measurements and your ability to document and record measurement data will be assessed in all performance based activities. Your ability to communicate technical information will be assessed by your instructor as part of your oral presentation. The standards expected and the level of quality of meeting those standards is stated with the assignment.

Grading Policy
Labs 35%
Homework 15%
3 tests 30%
Final Exam 15%
Attendance and participation 5%

Additional open lab time will be available as scheduled. Students may also use the Lab during other scheduled class times if space is available and with the permission of the instructor present.

Grading Scale:
Grades will be determined as follows (Average = Total points earned / Total points):

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<tr>
<th>Grade</th>
<th>Average</th>
<th>Points</th>
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<tr>
<td>A</td>
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<td>B</td>
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<td>C</td>
<td>70 – 79</td>
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<tr>
<td>D</td>
<td>60 – 69</td>
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Attendance Policy
A student is expected to attend all scheduled classes and laboratories. Each instructor will formulate an attendance policy and provide it on the course syllabus. Absences are counted from the first scheduled meeting of the class, and it is the responsibility of each student to know the attendance policy of each instructor in whose class he/she is enrolled. If a student is absent from a class, he/she should give an advanced explanation to the instructor. Absences in a course may affect a student’s final grade. The student is responsible for all assigned work in the course regardless of excused or unexcused absences. Tardiness may also affect a student’s final grade.
Failure to attend class will result in a final course grade of “FA” or “FN” (see explanation below) depending on the individual instructor’s course policy.
FA = failure, attendance-related (unofficial withdrawal) Last recorded date of attendance required.
FN = failure, never attended class (unofficial withdrawal)

Student Communication Channels
It is the student’s responsibility to check D2L and MyNSCC email on a regular basis. These are the official communication channels between the college and students. Students are responsible for the information communicated through those channels. D2L contains specific course information and MyNSCC contains information important for other purposes.

Early Warning System
Nashville State Community College has implemented an Early Warning System to notify students via e-mail about academic problems such as poor classroom attendance, poor performance on assignments/tests, poor communication skills, late/missing assignments, and/or lack of classroom participation. Please note that Early Warning Alerts do not affect a student’s academic standing.

ADA Compliance Statement
Nashville State complies with the Americans with Disabilities Act. If you wish to request any special accommodations for any courses in which you are enrolled, contact the Student Disabilities Office at 353.3721.

Classroom Misconduct
Nashville State Community College has a zero tolerance policy for disruptive conduct in the classroom. Students whose behavior disrupts the classroom will be subject to disciplinary sanctions. Please consult your Student Handbook for more specific details.
The instructor has primary responsibility for control over classroom behavior and maintenance of academic integrity. He/she can order temporary removal or exclusion from the classroom of any student engaged in disruptive conduct or in conduct which violates the general rules and regulations of the College.
Disruptive behavior in the classroom may be defined as, but is not limited to, behavior that obstructs or disrupts the learning environment (e.g., offensive language, harassment of students and professors, repeated outbursts from a student which disrupt the flow of instruction or prevent concentration on the subject taught, failure to cooperate in maintaining classroom decorum, etc.), the continued use of any electronic or other noise or light emitting device which disturbs others (e.g., disturbing noises from beepers, cell phones, palm pilots, lap-top computers, games, etc.).
Please be aware that children are not allowed in class or unattended on campus.

Academic Dishonesty (Honor Code)
Any form of academic dishonesty, cheating, plagiarizing, or other academic misconduct is prohibited. “Plagiarism may result from: (1) failing to cite quotations and borrowed ideas, (2) failing to enclose borrowed language in quotation marks, and (3) failing to put summaries and paraphrases in your own words (A Writer’s Reference 331). Academic dishonesty may be defined as, but is not limited to, intentionally trying to deceive by claiming credit for the work of another person, using information from a web page or source without citing the reference, fraudulently using someone else’s work on an exam, paper, or assignment, recycling your own
work from another course, purchasing papers or materials from another source and presenting them as your own, attempting to obtain exams/materials/assignments in advance of the date of administration by the instructor, impersonating someone else in a testing situation, providing confidential test information to someone else, submitting the same assignment in two different classes without requesting both instructor’s permission, allowing someone else to copy or use your work, using someone else’s work to complete your own, altering documents, transcripts or grades, and forging a faculty/staff member’s signature.
In addition to other possible disciplinary sanctions that may be imposed through regular college procedures as a result of academic dishonesty the instructor has the authority to assign an “F” or a “Zero” for the exercise, paper, or examination or to assign an “F” for the course. Students may appeal through the appropriate college grade appeal procedures.

**Inclement Weather Policy**

In the event of an inclement weather event, check the Nashville State web site home page at www.nscc.edu for announcements on campus closures. Campus closures will also be announced on local television stations (channels 2, 4, 5, and 17).
When classes are cancelled, an online assignment will be posted in NS Online. Check your NS Online email for a message from your instructor regarding your online assignment requirements. Even though classes may be cancelled, some areas, i.e. Testing Center, may be open. However, you should check before commuting to campus.

The Vice President for Academic Affairs and the Director of Security are responsible for cancellation decisions during an inclement weather event for the Nashville State main campus and the Southeast campus. Cookeville, Waverly, and Dickson Campus Directors will make class cancellation decisions based on conditions in their respective areas. Decisions about class cancellations are based on actual conditions, not forecasts. The perspective used for making decisions is that of the college as an employer, not as a K-12 institution. Students should use their own best judgment in determining whether to report to campus during inclement weather when classes are not cancelled.

**NOTE:** This syllabus is meant simply as a guide and overview of the course. Some items are subject to change or may be revised at the instructor’s discretion. Each instructor will further clarify their criteria for grading, classroom procedures, attendance, exams and dates, etc. on his/her course syllabus.