

**PELLISSIPPI STATE COMMUNITY COLLEGE
MASTER SYLLABUS**

**CIVIL ENGINEERING SPECIAL TOPICS
CET 2070**

Class Hours: varies

Credit Hours: 1-3

Laboratory Hours: varies

Revised: Fall 2013

Catalog Course Description:

This course provides an overview of local industries engaged in the practice of civil engineering and related activities. Special projects and applications in emerging civil and construction engineering technology are emphasized. The student visits offices and construction projects to observe practical work situations. Speakers are invited to the classroom to discuss topics in the civil engineering technology field.

Entry Level Standards:

Students should have mathematics, reading, and writing skills at the college level.

Prerequisites:

None

Textbook(s) and Other Course Materials:

Textbooks will vary, depending on the course topic and the instructor.

I. Week/Unit/Topic Basis:

Week	Topic
1-14	Activities will vary according to course content and may include lectures, discussions, field trips, experiments, individual and/or group projects, essays, and term papers. The course syllabus distributed on the first day of class will list specific information.
15	Final Exam Period

II. Engineering Technology General Outcomes (Educational objectives)

- I. Apply basic engineering theories and concepts creatively to analyze and solve technical problems
- II. Utilize with a high degree of knowledge and skill equipment, instruments, software, and technical reference materials currently used in industry.
- III. Communicate effectively using developed writing, speaking, and graphics skills.
- IV. Assimilate and practice the concepts and principles of working in a team environment.
- V. Obtain employment within the discipline or matriculate to a four year program in

engineering or industrial technology

III. Engineering Technology Concentration Competencies*

Students will:

- A. Apply the knowledge, techniques, skills, and modern tools for the concentration of study to specifically defined engineering technology activities
 - B. Demonstrate the knowledge of mathematics, science, engineering and technology to engineering technology problems using developed practical knowledge
 - C. Conduct and report the results of standard tests and measurements, and conduct, analyze and interpret experiment or project results
 - D. Function effectively as a member of a technical team
 - E. Identify, analyze and solve specifically defined engineering technology-based problems
 - F. Employ written, oral and visual communication in a technical environment
- At the program level all 6 competencies apply to roman numerals I – V of the Engineering Technology General Outcomes (Educational objectives) listed above.

IV. Course Goals*:

The course will

1. Provide opportunities for students to have unique experiences in learning about applications in the selected program of study. (A-F depending upon the topic)
2. Develop an understanding of new opportunities in program-related technology. (A-F depending upon the topic)
3. Develop critical thinking skills and problem solving skills to review and analyze information relating to the selected topic. (A-F depending upon the topic)
4. Develop an appreciation of the societal issues involved with the special topic, as appropriate. (A-F depending upon the topic)
5. Present an oral report on the project. (A-F depending upon the topic)

*Capital letters after course goals reference the competencies of the Engineering Technology concentrations listed above.

V. Expected Student Learning Outcomes*:

Students will be able to:

- a. Discuss basic and advanced facts associated with the selected topic. (1,2,3,4)
- b. Employ critical thinking skills to solve problems. (1,2,3,4)
- c. Perform independent research using published references, laboratory testing and mathematical analysis. (1,2,3,4)
- d. Identify, explain, and apply civil engineering technology design concepts. (1,2,3,4)

- e. Demonstrate the ability to integrate the course information into related projects. (1,2,3,4)
- f. Communicate their findings through oral and written reports. (1,2,3,4,5)

*Numbers after Expected Student Learning Outcomes reference the course goals listed above.

VI. Evaluation:

A. Testing Procedures:

The specific evaluation methods will vary according to the course content. Essay test questions, participation in class activities, individual and/or group projects, and written out-of-class papers may all be a part of the evaluation process. The course syllabus distributed on the first day of class will list specifics.

B. Laboratory Expectations:

Varies according to topic. The course syllabus distributed on the first day of class will list specifics.

C. Field Work:

Varies according to topic. The course syllabus distributed on the first day of class will list specifics.

D. Other Evaluation Methods:

None.

E. Grading Scale:

A	90-100
B+	85-89
B	80-84
C+	75-79
C	70-74
D	60-69
F	Below 60

VII. Policies:

A. Attendance Policy:

Pellissippi State expects students to attend all scheduled instructional activities. As a minimum, students in all courses (excluding distance learning courses) must be present for at least 75 percent of their scheduled class and laboratory meetings in order to receive credit for the course. Individual departments/programs/disciplines, with the approval of the vice president of Academic Affairs, may have requirements that are more stringent. In very specific circumstances, an appeal of the policy may be addressed to the head of the department in which the course was taken. If further action is warranted, the appeal may be addressed to the vice president of Academic Affairs.

B. Academic Dishonesty:

Academic misconduct committed either directly or indirectly by an individual or group is subject to disciplinary action. Prohibited activities include but are not limited to the following practices:

- Cheating, including but not limited to unauthorized assistance from material, people, or devices when taking a test, quiz, or examination; writing papers or reports; solving problems; or completing academic assignments.
- Plagiarism, including but not limited to paraphrasing, summarizing, or directly quoting published or unpublished work of another person, including online or computerized services, without proper documentation of the original source.
- Purchasing or otherwise obtaining prewritten essays, research papers, or materials prepared by another person or agency that sells term papers or other academic materials to be presented as one's own work.
- Taking an exam for another student.
- Providing others with information and/or answers regarding exams, quizzes, homework or other classroom assignments unless explicitly authorized by the instructor.
- Any of the above occurring within the Web or distance learning environment.

Please see the Pellissippi State Policies and Procedures Manual, Policy 04:02:00 Academic/Classroom Conduct and Disciplinary Sanctions for the complete policy.

C. Accommodations for disabilities:

Students that need accommodations because of a disability, have emergency medical information to share, or need special arrangements in case the building must be evacuated should inform the instructor immediately, privately after class or in her or his office. Students must present a current accommodation plan from a staff member in Services for Students with Disabilities (SSWD) in order to receive accommodations in this course. Services for Students with Disabilities may be contacted by sending email to disabilityservices@pstcc.edu, or visiting Goins 127, 132, 134, 135, 131. More information is available at <http://www.pstcc.edu/sswd/>.

D. Other Policies:

Safety and Equipment Abuse:

Repeated safety violations will result in a reduction of final grade, at the instructor's discretion. Flagrant violations which result in equipment damage or personal injury could result in automatic failure of the course