

PELLISSIPPI STATE TECHNICAL COMMUNITY COLLEGE
MASTER SYLLABUS

**CIVIL ENGINEERING TECHNOLOGY SEMINAR
CET 1000**

Class Hours: 0.0

Credit Hours: 1.0

Laboratory Hours: 3.0

**Date Revised: Spring
02**

Catalog Course Description:

This course provides the Civil Engineering Technology student an opportunity to observe the organization and function of local industries engaged in the practice of civil engineering and related activities. The student will visit offices, plant sites and construction projects to observe practical work situations. Speakers will be invited to the classroom to discuss topics in the civil engineering technology field.

Entry Level Standards:

This course is open to all students interested in a career in the Civil Engineering Technology field. No technical knowledge is required. The student should be able to read and listen comprehensively, take notes and prepare short site-visit reports and to make oral presentations on these visits to other class members and the instructor.

Prerequisites:

None

Textbook(s) and Other Reference Materials Basic to the Course:

None

I. Week/Unit/Topic Basis:

Typical weekly topics. Topics vary each semester. There will be a mix of field trips and invited speakers. A schedule will be distributed at the beginning of the semester.

Week	Topic
1	Course introduction, review planned activities and course requirements
2	Observing, interviewing and note taking skills
3	Speaker--safety guidelines (OSHA) for office, manufacturing and construction sites
4	Myers Briggs
5	ORNL-- Environmental Emphasis
6	Speaker--Environmental Issues in Civil Engineering

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| 7 | KUB-Middlebrook Pike |
| 8 | Speaker--Recent graduate from CET Program |
| 9 | Visit an engineering research and development organization |
| 10 | Highway Construction site |
| 11 | Speaker BNPDES |
| 12 | Erosion Control Project |
| 13 | Ethics |
| 14 | Visit a consulting engineering office |
| 15 | Speaker BJob Interview skills |
| 16 | Final Exam |

II. Course Objectives*:

- A. Understand the organization of business and industry. I,II, IV
- B. Understand the roles of engineers and technician and how they work together in the typical Civil Engineering environment. I,II,IV,IV
- C. Recognize the attributes of a good technician. I,IV
- D. Appreciate the role of health and safety in the work environment. I,IV
- E. Develop good interviewing, observational and note taking skills. III
- F. Maintain a personal journal and write short reports from these notes. III
- G. Understand the importance of developing good work habits and personal ethics. V

*Roman numerals after course objectives reference goals of the CET program.

III. Instructional Processes*:

Students will:

1. Participate in classroom discussions which challenge the students' ability to think creatively. *Communication Outcome, Problem Solving and Decision Making Outcome, Active Learning Strategy*
2. Participate in site visits and invited guest lecturers from the engineering community to help in the transition from the classroom and laboratory to work. *Transitional Strategy, Communication Outcome, Active Learning Strategy*
3. Prepare reports in a professional manner describing the site visited using notes from the students' journals. *Communication Outcome, Informational Literacy Outcome, Active Learning Strategy, Technological Literacy Outcome*
4. Discuss the importance of such personal qualities of ethics and personal responsibility in school and in the workplace. *Communication Outcome, Personal Development Outcome,*

Active Learning Strategy

*Strategies and outcomes listed after instructional processes reference Pellissippi State's goals for strengthening general education knowledge and skills, connecting coursework to experiences beyond the classroom, and encouraging students to take active and responsible roles in the educational process.

IV. Expectations for Student Performance*:

Upon successful completion of this course, the student should be able to:

1. Describe the organization of Civil Engineering related businesses and industries. A
2. Compare the organizations of different Civil Engineering related businesses and industries. A
3. Identify the Achain of command and communication. A
4. Identify the function of technicians. B
5. Define the relationship between technicians and engineers. B
6. List the variety of job tasks required of technicians within Civil Engineering related businesses and industries. B
7. List the attributes of a good technician. C
8. Understand ethical conduct of technicians. C
9. Identify good safety practices on job sites visited. D
10. Determine the existence of a safety training program on job sites visited. D
11. Identify safety violations on job sites visited. D
12. List communication skills used most frequently by technicians within Civil Engineering related businesses and industries. E
13. Demonstrate good interviewing skills. E
14. Demonstrate good observational and note taking skills. E
15. Prepare written reports on site visits. F
16. Prepare and maintain a personal journal of class activities similar to a job log. F

*Letters after performance expectations reference the course objectives listed above.

V. Evaluation:

A. Testing Procedures:

N/A

B. Laboratory Expectations:

Written Assignments:

Students will be required to maintain a personal journal in which notes from the seminar

speakers and notes from the site visits are recorded. Students will prepare a 2-3 page report describing each site visit which is due at the beginning of the class following the visit. The papers must be typed and they will be graded for technical content and for grammar. The journals are the students personal records. They will be checked weekly but will not be turned in to the instructor. Ninety percent of the course grade will be based upon the written assignments.

C. Field Work:

Seminars and Site Visits:

Students are expected to attend all class and site visits. Students are encouraged and rewarded for engaging in discussions both in class and at the site visits. One missed site visit or class can be made up by preparing a paper on a special topic selected by the instructor. Ten percent of the course grade is based upon the instructor's subjective opinion of the student's participation in activities.

D. Other Evaluation Methods:

N/A

E. Grading Scale:

The term grade will be based on the scores received on the papers, class participation and attendance.

A 90-100
B 80-90
C 70-80
D 60-70
F <60

VI. Policies:

Attendance Policy:

Pellissippi State Technical Community College expects students to attend all scheduled instructional activities. As a minimum, students in all courses must be present for at least 75 percent of their scheduled class and laboratory meetings in order to receive credit for the course (Pellissippi State Catalog). Individual departments/programs/disciplines, with the approval of the vice president of Academic and Student Affairs, may have requirements that are more stringent.

Attendance at all lectures and trips is required. It is crucial that students participate. Considerable effort is expended by the instructor in planning these activities and by the guest speaker or tour guide at a plant visit. It is common courtesy to attend and be attentive.

Should circumstances require that you miss a class, you must notify your instructor as soon as you are aware that you will miss. You may make up only one missed lecture or site visit by completing a special assignment.