Catalog Course Description:

Projects related to practical applications of design, allowing students to use theory, methods and practices similar to those encountered on the job. Group design projects are developed by a team of students under faculty supervision. This course credit depends upon the complexity of the project.

Entry Level Standards:

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

Prerequisite:

Consent of instructor

Textbook(s) and Other Course Materials:

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

I. Week/Unit/Topic Basis:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-14</td>
<td>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.</td>
</tr>
<tr>
<td>15</td>
<td>Final Exam Period</td>
</tr>
</tbody>
</table>

II. Course Objectives*:

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

A. Apply basic skills and knowledge of Civil Engineering Technology. (A-N depending upon the topic)

B. Develop an understanding of new opportunities in program-related technology. (A-N depending upon the topic)

C. Develop critical thinking skills and problem solving skills to review and analyze information relating to the selected topic. (A-N depending upon the topic)

D. Develop an appreciation of the societal issues involved with the special topic, as appropriate. (A-N depending upon the topic)
E. Prepare a report describing the project, its significance, the results and the conclusions. (A-N depending upon the topic)

F. Present an oral report on the project. (A-N depending upon the topic)

*Letters after course objectives reference CET Program Outcomes (as required by ABET).

**III. Instructional Processes**: 

Students will:

1. Engage in teamwork to facilitate cooperative learning. *Communication Outcome, Active Learning Strategies*

2. Use critical thinking skills to solve problems. This will be done in groups to promote idea sharing. *Communication Outcome, Technological Literacy Outcome, Active Learning Strategies*

3. Consider the impact of technology on contemporary professional, societal and global issues. *Technological Literacy Outcome, Humanities and/or Fine Arts Outcome, Social and/or Behavioral Sciences Outcome*

4. Perform independent research using published references, laboratory testing and mathematical analysis. *Communication Outcome, Mathematics Outcome, Transitional Strategies, Active Learning Strategies*

5. Communicate their findings through oral and written reports. *Communications Outcome*

*Strategies and outcomes listed after instructional processes reference TBR’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. Discuss basic and advanced facts associated with the selected topic. A, B, C, D

2. Discuss implications for society based on information regarding the selected topic. A, B, C, D

3. Discuss implications for the future based on information regarding the selected topic. A, B, C, D

4. Understand the manner in which the special topic fits into the overall picture of the program of study. A, B, C, D

5. Analyze optional technologies and select most appropriate one. A, B, C, D

6. Demonstrate the ability to integrate the course information into related projects. A, B, C, D

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

**V. 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. Grading Scale:

- 90-100 A
- 80-89 B
- 70-79 C
- 60-69 D
- below 60 F

VI. Policies:

A. 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.

B. Academic and Classroom Misconduct:

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.

In addition to other possible disciplinary sanctions that may be imposed as a result of academic misconduct, the instructor has the authority to assign either (1) an F or zero for the assignment or (2) an F for the course.

C. Accommodations for disabilities:

If you need accommodation because of a disability, if you have emergency medical information to share, or if you need special arrangements in case the building must be evacuated, please inform the instructor immediately. Privately after class or in the instructor’s office.

To request accommodations students must register with Services for Students with Disabilities: Goin's 127 or 131, Phone: (865) 539-7153 or (865) 694-6751 Voice/TDD.

D. Use of Equipment:

Any act of misuse, vandalism, malicious or unwarranted damage or destruction, defacing, disfiguring, or unauthorized use of property/equipment belonging to Pellissippi State is subject to disciplinary sanction.