Class Hours: 1.0          Credit Hours: 4.0
Laboratory Hours: 3.0    Revised: Fall 08

Catalog Course Description:

The class and the instructor identify a project which will require 3D digital models, physical models
and dimensioned drawings. Students are expected to produce sketches, working drawings, details,
sections, auxiliary views, etc. as required to completely describe the project to the instructor. In
addition, students will create a digital presentation of their work and a physical, working model.

Entry Level Standards:

Students must have at least 20 hours of CID credits. Familiarity with word processor and
spreadsheet is required. Standard English usage is required.

Prerequisites:

Program coordinator approval and second-year standing

Textbook(s) and Other Course Materials:

As required to complete project(s).

I. Week/Unit/Topic Basis:

The student/intern shall determine a work schedule to afford a minimum of 100+ hours on the project(s)
that are to be accomplished during the semester. It is the intern's responsibility to advise the supervisor if
the scheduled hours cannot be maintained. A weekly conference is required with an advisor.
Students signed up for Co-op will be expected to write a proposal and summary of co-op experience.

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1-14</td>
<td>Over the 14-week semester, the following topics will be covered: Review of syllabus, overview of project, team organization Excel Spreadsheet; time sheet &amp; linked check form Project organization, layout, required files Team meetings with project reports and updates HTML project PowerPoint presentation Technical documents with Adobe Acrobat Web &amp; electronic industry resources Mid-Semester Review NOCTI exit exam Portfolio of CID work Final Presentation</td>
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II. Course Objectives*:

A. Integrate & incorporate previous class work. (a,b,c,d,g )
B. Develop graphic communication skills required by industry. (a,g )
C. Develop verbal and written communications skills required by industry. (g )
D. Draw, illustrate and dimension documents required to communicate scope of project and technical information required to construct or manufacture project. (a )
E. Develop a schedule to complete the project. (g,k )
F. Use Internet, library and other resources. (a,d )
G. Work as a team member to complete project. ( e,k)
H. Present work for mid-semester and at end of semester review. (e,g )
I. Prepare students for job searches. (a,g,h,k)

*Letters (a-k) after course objectives reference CID Program Outcomes (as required by ABET).

III. Instructional Processes*:

Students will:

1. Use a CAD application to create a related set of parts and drawings. Technological Literacy Outcome

2. Import graphic files, scale to standard industry requirements and use to generate standard details. Technological Literacy Outcome, Active Learning Strategy

3. Use standard industry reference materials in electronic format. Technological Literacy Outcome, Communication Outcome, Active Learning Strategy

4. Use CAD applications to create an assembly drawing. Technological Literacy Outcome, Active Learning Strategy

5. Use dimensioning tools to completely and properly dimension final drawings as well as use annotation tools to completely annotate final drawing. Technological Literacy Outcome, Communication Outcome, Mathematics Outcome

6. Use word processor and spreadsheet to generate reports and memos and calculations. Communication Outcome, Active Learning Strategy, Technological Literacy Outcome, Mathematics Outcome

7. Use industry standard tools for communication of reports and technical documents. Technological Literacy Outcome, Communication Outcome

8. Use CAD application to generate plots according to industry standards. Technological Literacy Outcome, Communication Outcome

9. Develop job search documents; portfolio, resume, cover letter. Technological Literacy Outcome, Communication Outcome, Transitional Strategies
*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. Complete time sheets, write memos & reports typically required by industry. C,E,F
2. Use Web/HTML as a communication tool. C,F,H
3. Create technical documents with Adobe Acrobat. A,B,D
4. Research and write report on industry resource related to project. C,F
5. Assume responsibility for and complete a portion of the team project. A,B,D,E,G
6. Use one or more advanced function of a CAD application. A,B,D
7. Participate in project presentation. G,H,I
9. Use Email as communication tool. B
10. Participate in team discussions. C,G
11. Create job search documents. A,B,C,D,I

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

V. Evaluation Procedures:

All communication will be handled in a professional manner. Verbal agreements will be followed up with written confirmation, which may be in memo format. Written communication shall be typed and in acceptable business format following Standard English usage and minimum of spelling errors. It is the responsibility of the student to produce confirmations and communication documents unless otherwise agreed to by the supervisor.

---Team evaluations: 40% of grade
1. Project proposal as a business letter 5%
2. Schedule 3%
3. Progress reports & presentations 10%
4. Completion of project 10%
5. Team presentation 10%
6. Team evaluation 2%

---Individual Team member evaluation: 60% of grade
1. Memo describing individual’s responsibility 2%
2. Progress drawing team member’s responsibility 10%
3. Completed drawings team member’s responsibility 20%
4. Report on industry resources with documentation. 3%
5. Technical documents team member is responsible for 5%
6. HTML web presentation 5%
7. Portfolio PowerPoint presentation 5%
8. Participation in presentations 5%
9. Team participation 5%

Grading Scale:

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\begin{align*} 
A &= 91-95 \\
B+ &= 86-90 \\
B &= 81-85 \\
C+ &= 76-80 \\
C &= 71-75 \\
D &= 61-70 \\
F &= Below 61 
\end{align*} \]

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. Individual departments/programs/disciplines, with the approval of the vice president of Academic and Student Affairs, may have requirements that are more stringent.

B. Academic 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.

NOTE: It is expected and desirable that CID students assist other students. However, students may only submit work completed by themselves.

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: Goins 127 or 131, Phone: (865) 539-7153 or (865) 694-6751 Voice/TDD.