PELLISSIPPI STATE COMMUNITY COLLEGE
MASTER SYLLABUS

ADVANCE AUTOCAD
CID 2150

Class Hours: 3  Credit Hours: 4
Laboratory Hours: 3  Date Revised: Fall 2010

Catalog Course Description:

Expands the knowledge and use of AutoCAD software commands with the continuation of training begun in CID. The course covers topics involving the creation and manipulation of orthographic and three-dimensional drawings, introduction of solid modeling, the concept of creation and management of symbol libraries, and rendering the models. The students will be able to use AutoCAD to enhance their performance in producing various drafting projects, create a three-dimensional model, and turn the model into a fully detailed set of working drawings.

Entry Level Standards:

Must have college level English and math skills.

Prerequisites:

ENGT 1100

Corequisites:

NA

Textbook(s) and Other Course Materials:

Required Text: 
Harnessing AutoCAD 2010 Thomas A. Stellman, and G.V. Krishnan (International Thomson Publishing)
Reference: 
Technical Drawing MacMillion (Giesecke)
Other Materials: 
Notebook and Digital storage media

I. Week/Unit/Topic Basis:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Review course syllabus &amp; course expectations; File organization &amp; requirements; Review AutoCAD commands, menus and environment, introductory drawings</td>
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<tr>
<td>2</td>
<td>AutoCAD imperial &amp; metric templates with dimstyles, textstyles, layouts, viewports</td>
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<tr>
<td>3</td>
<td>Orthographic views with dimensions</td>
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<tr>
<td>4</td>
<td>Continue orthographic views with dimensions</td>
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<tr>
<td>5</td>
<td>2D assembly</td>
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</tbody>
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II. Course Goals*:

The course will

A. Use template files, prototype drawings, and drafting standards (II)

B. Use all AutoCAD drawing commands to reinforce a professional approach to drafting and modeling (II, III, IV)

C. Create and use symbols and blocks effectively (I, II)

D. Create, modify and manipulate 3 dimensional models (I, II)

E. Navigate the Windows environment effectively and use other ‘office’ applications typically used by industry (II)

F. Use AutoCAD to generate professional level annotated drawings, and other computer applications required to communicate effectively in a professional environment. (II, III, IV, V)

*Alphabet letters after course objectives reference Engineering Technology Program Educational Outcomes.

III. Expected Student Learning Outcomes*:

Students will be able to:

1. Create and use AutoCAD template files with textstyles, dimstyles, layouts, viewports, etc. (A)

2. Draw accurate 2D orthographic drawings (B, C)

3. Use annotation tools (text, dimensions) to create professional quality drawings (B, F)

4. Create, modify and manipulate 3 dimensional solid models of mechanical parts (B, C, D)

5. Convert 3 dimensional models to 2 dimensional orthographic views (B, F)
6. Use XRef commands to create assembly drawings (B, C, F)
7. Generate & print rendered models views (D, F)
8. Print annotated drawings at specified scale and according to professional standards (F)

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

IV. Evaluation:

A. Testing Procedures: 20% of grade

   The purpose of this class is to provide more practice with complex drawings. Students will be evaluated on the correctness of assigned drawings, formal tests, and quizzes.

B. Laboratory Expectations: 30% of grade

   Students will be evaluated on the correctness of assigned drawings, on-line tests, and quizzes. activities to reflect theoretical concepts of the course.

C. Field Work: 50% of grade

   Students will be assigned several sets of working drawings including 3-D solid model, rendering, and all necessary orthographic drawings required to sufficiently describe the part/parts for manufacture or construction. These projects are practice for real world applications and in preparation for the final CIDD project class..

D. Other Evaluation Methods: 0% of grade

   NA

E. Grading Scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Score Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90-100</td>
</tr>
<tr>
<td>B+</td>
<td>85-89.99</td>
</tr>
<tr>
<td>B</td>
<td>80-84.99</td>
</tr>
<tr>
<td>C+</td>
<td>75-79.99</td>
</tr>
<tr>
<td>C</td>
<td>70-74.99</td>
</tr>
<tr>
<td>D</td>
<td>60-69.9</td>
</tr>
<tr>
<td>F</td>
<td>Below 59.99</td>
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</tbody>
</table>

V. 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 the Learning Division, 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 the Learning Division.

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.

C. Accommodations for disabilities:

Students who 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 going to Goins 127, 132, 134, 135, 131 or by phone: 539-7153 or TTY 694-6429. More information is available at www.pstcc.edu/departments/swd/.

D. Other Policies:

Students are expected to take utmost care when using equipment provided by Pellissippi State. No tobacco use, eating, drinking will be allowed in labs. Students are not to load unauthorized software on the computers. Do not use floppy disks for CAD drawings in any other computers other than in CID labs. Students are responsible for maintaining current copies of drawings on their disks. Do not relocate computers, monitors, digitizers or keyboards without supervision by an instructor. Do not copy, delete or move files without instruction by an instructor.