NOTE: This course is not designed for transfer credit.

Catalog Course Description:

Computer-aided design and drafting skills for Interior Design applications using AutoCAD and other CAD applications. Word processing and spreadsheet software are also incorporated to prepare professional technical reports.

Entry Level Standards:

Students should exhibit proficiency in manual architectural drafting and have basic math skills.

Prerequisite:

IDT 1310

Textbook(s) and Other Course Materials:

Other supplies - 3 1/2" floppy disks (HD)

I. Week/Unit/Topic Basis:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1</td>
<td>Introduction, Course objectives</td>
</tr>
<tr>
<td>2</td>
<td>Basic commands and setting; Printing and Plotting</td>
</tr>
<tr>
<td>3</td>
<td>Adding text to drawings; Drawing floor plans</td>
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<tr>
<td>4</td>
<td>Dimensioning and Area Calculations</td>
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<tr>
<td>5</td>
<td>Elevations, Sections and Details</td>
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<tr>
<td>6-7</td>
<td>Attributes; Adding specifications to furnishings</td>
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<tr>
<td>8</td>
<td>Reflected ceiling plans</td>
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<tr>
<td>9</td>
<td>Isometric drawings</td>
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<tr>
<td>10-13</td>
<td>Basic 3-D modeling; Solid modeling</td>
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<tr>
<td>14-15</td>
<td>Other CAD applications</td>
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</table>
Final drawings (Final exam on CAD timed drawing)

II. Course Objectives*:

A. Execute CAD-generated 2-D architectural drawings including plans, elevations, sections and details. II, III, IV, V, VI

B. Perform CAD commands to include such things as text and dimensioning to architectural drawings. II, III, IV, V, VI, VII

C. Demonstrate proficiency using attributes to produce architectural drawings. II, III, IV, V, VI, VII

D. Generate basic 3-D architectural images using CAD software. II, III, IV, V, VI, VII

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

III. Instructional Processes*:

Students will:

1. Engage in collaborative activities working in team settings to complete required assignments. Communication Outcome, Personal Development Outcome, Problem Solving and Decision Making Outcome, Transitional Strategy, Active Learning Strategy

2. Become proficient using CAD software and required computer hardware currently being used in the industry. Personal Development Outcome, Problem Solving and Decision Making Outcome, Technological Literacy Outcome, Information Literacy Outcome, Transitional Strategy, Active Learning Strategy

3. Develop research methodology using the internet as well as manufacturer’s sources available through CD-rom. Technological Literacy Outcome, Information Literacy Outcome, Transitional Strategy, Active Learning Strategy

4. Develop presentation skills, both visual and verbal, by generating architectural CAD drawings. Communication Outcome, Technological Literacy Outcome, Information Literacy Outcome, Transitional Strategy, 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. Understand basic WINDOWS NT commands. A,B,C,D

2. Understand the benefits of a CAD system as a drafting tool. A,B,C,D

3. Execute basic commands required for generating architectural drawings. A,B,C,D

4. Produce accurate architectural plans using CAD software. A

5. Produce accurate elevations, details and sections using CAD software. A

6. Produce architectural CAD drawings with professional quality graphic standards. A,B,C
7. Dimension an architectural drawing using CAD software.  B
8. Place text within architectural drawings using CAD software.  B
9. Use attributes to add specifications to drawings.  C
10. Execute isometric drawings using CAD software.  D
11. Generate simple 3-D solid and/or wire-frame models using primitive commands.  D
12. Use layering concepts to organize graphic elements using CAD software.  A,B,C,D
13. Produce prints and plots from CAD software.  A

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

V. Evaluation:

A. Grading Procedures:

Evaluation in this course will be based on the quality of the drawings produced, homework, and short quizzes given during the semester. There will be a timed drawing done as the final exam. Final grades will be calculated as follows:

- Drawings - 40%
- Homework assignments - 30%
- Quizzes - 10%
- Final drawing - 10%

All projects will be due at a specified time. A project turned-in after the due date will have 5 points deducted for every day it is late. For example, a project due on Monday will have 10 points deducted from the overall grade if submitted on the following Wednesday. In addition, weekends count as 2 days such that a project due on Friday that is turned-in on Monday will have 15 points deducted from the grade.

B. Laboratory Expectations:

This course is primarily a laboratory course. Lecture time will be spent explaining the various principles and standards required for professional quality graphics. The student’s laboratory time will be spent applying these principles to create specific drawings on the computer. It is not intended that the time required to complete projects fit within the scheduled class or lab period.

C. Grading Scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>90-100</td>
</tr>
<tr>
<td>B</td>
<td>80-89</td>
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<tr>
<td>C</td>
<td>70-79</td>
</tr>
<tr>
<td>D</td>
<td>60-69</td>
</tr>
<tr>
<td>F</td>
<td>Below 60</td>
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VI. Policies:

A. Attendance Policy:

Class attendance for the full period is mandatory for all students. A significant portion of each project phase or aspect must be completed in class in order to receive credit for the work. You are responsible for all materials and information given during class. In the event of an absence, information about upcoming classes should be obtained from fellow classmates or the instructor prior to the next class.
period. Attendance will be taken only at the beginning of the class. Parking problems, car problems, and work conflicts do not constitute excused absences. You will be marked late at five minutes after the class is scheduled to begin. Habitual tardiness will result in the lowering of your final grade with FIVE tardies being equal to an absence. An absence (excused or unexcused) does not constitute reason for non-submittal of a project or exercise which is due on the day of the absence. If a project or exercise is due the next class period following an absence (excused or unexcused) you are still responsible for completion of such.

B. Academic Dishonesty:

Cheating will not be tolerated although student cooperation and information sharing is expected and welcomed during laboratory time. In keeping with college-wide policies, the student is expected to adhere to the general rules and regulations relevant to academic and classroom misconduct as outlined in the catalog.

C. Equipment:

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. CID labs are structured such that two students share a computer during lab periods.