PELLISSIPPI STATE TECHNICAL COMMUNITY COLLEGE
MASTER SYLLABUS

RESIDENTIAL DESIGN & CONSTRUCTION
IDT 1500

Class Hours: 0.0
Credit Hours: 4.0
Laboratory Hours: 6.0
Date Revised: Spring 02

Catalog Course Description:
Principles of spatial organization, creative problem solving and communication techniques in residential design. Integrates working drawings, materials and processes, presentation methods, and residential design.

Entry Level Standards:
The student entering this course must have architectural drafting skills and basic residential construction knowledge.

Prerequisites:
IDT 1000, 1050, 1300

Corequisites:
CID 1210; IDT 1100, 1400

Textbook(s) and Other Reference Materials Basic to the Course:
Materials: Materials List given the first day of class
Lab Fee: $5.00
Lab fee will be collected from each student for the purchase of blue print paper and other materials used by entire class.

I. Week/Unit/Topic Basis:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction, Course Objectives, etc. Using Drafting Equipment/Drafting Exercise Assign Drafting Exercise # 1</td>
</tr>
<tr>
<td>2</td>
<td>Floor Plans and Symbols Electrical and Lighting plans Schedules and Specifications</td>
</tr>
<tr>
<td>3</td>
<td>The Design Process</td>
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</tbody>
</table>
Assign Design Project #1
Residential Design
Entryways, Halls, Doors, Stairs etc.
Laundry Spaces
Half and 3/4 Baths
Home Offices/Computer Rooms
Storage/closets
Additional (ancillary spaces)
Recycling areas and garages
Sample Boards and Presentation Boards

4  Work in class on Project #1
5  Design Project #1 Due
Assign Design Project #2
Living Areas
6  Work in class on Project #2
7  Design Project #2 Due
Assign Design Project #3
Bedrooms and Bathrooms
8  Work in class on Project #3
9  Design Project #3 Due
Assign Design Project #4
Kitchens and Dining Areas
Elevations and Specifications
10-11 Work in class on Project #4
Design Project #4 Due
Assign Working Drawings
12-15 Work on Working Drawings
16 Working Drawings DUE
Final Presentation

The Week/Topic schedule is subject to change in the event of extenuating circumstances. Verbal changes to the schedule will most likely be given in class; you are responsible for attending each class or for obtaining important information from fellow classmates.

II. Course Objectives*:

A. Exhibit a knowledge of design and construction methods, details, terminology, symbols, materials, etc. used in residential design. I,II,IV,V,VI

B. Exhibit a comprehensive knowledge of residential design, including the materials, finishes and methods used, as well as drawings to be included in a set of residential working drawings. I,II,III,IV,V,VI

C. Demonstrate appropriate drafting and lettering skills as well as dimensioning rules and standards. I,II,III,IV,V
D. Apply the stages of the design process and programming. I,II,III,VI

E. Communicate, both graphically and verbally, a design solution. II,III

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

**III. Instructional Processes***:

Students will:

1. Develop a design presentation methodology in order to communicate design solutions effectively in the design industry. *Communication Outcome, Personal Development Outcome, Problem Solving and Decision Making Outcome, Transitional Strategy, Active Learning Strategy*

2. Begin development of a portfolio of work necessary to acquire a position in the interior design field after graduation. *Personal Development Outcome, Transitional Strategy*

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

4. Develop a professional work ethic by regularly attending class, being punctual, cooperating with fellow classmates and showing a positive attitude. *Personal Development Outcome, Transitional Strategy*

5. Complete assignments requiring application of learned theories. *Communication Outcome, Problem Solving and Decision Making Outcome, Technological Literacy Outcome*

6. Analyze and apply current styles, trends, materials, and processes according to cultural and social status. *Problem Solving and Decision Making Outcome, Cultural Diversity and Social Adaptation Outcome, Information Literacy Outcome, Transitional Strategy*

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*

7. Develop presentation skills, both visual and verbal, by generating architectural drawings either manually or computer generated. *Communication Outcome, Technological Literacy Outcome, Information Literacy Outcome, Transitional Strategy, Active Learning Strategy*

Develop time management skills in order to complete required lab work on time in a professional manner. *Personal Development Outcome, Problem Solving and Decision Making Outcome, Transitional Strategy*

8. Develop presentation skills, both visual and verbal, by presenting design ideas and solutions. *Communication Outcome, Personal Development Outcome, Problem Solving and Decision Making Outcome, Technological Literacy Outcome, Information Literacy Outcome, Transitional Strategy, Active Learning Strategy*

9. Learn appropriate technologies. *Technological Literacy Outcome*

Use critical thinking to solve problems individually and in team situations to promote idea sharing. *Problem Solving and Decision Making Outcome, Active Learning Strategy*
Engage in teamwork to facilitate cooperative learning. *Active Learning Strategy*

13. Read assigned essays and participate in class discussion. *Communication Outcome, Active Learning Strategy*

14. Use related equipment and tools. *Personal Development Outcome, Problem Solving and Decision Making Outcome, Technological Literacy Outcome, Information Literacy Outcome, Transitional Strategy, Active Learning Strategy*

15.

*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. **Demonstrate acceptable drafting techniques including line quality, line weights and lettering methods.** A, C
2. **Understand construction methods and materials.** A, B
3. **Identify and apply the correct symbology used in design and drafting of the built environment.** A, B, C, E
4. **Utilize knowledge of the design of fundamental interior micro-environments, including living, entertainment and related social spaces, dining rooms, kitchens and related service areas, baths and related service areas, bedrooms, home offices, studies and private offices, entrances, foyers and related horizontal and vertical circulation spaces.** A, B, C, D, E
5. **Execute creative problem solving techniques applicable to interior design.** A, B, C, D, E
6. **Exhibit an understanding of interior architectural materials and finishes.** A, B
7. **Demonstrate a knowledge of furniture, fixtures and equipment (FF&E) plans, electrical and lighting plans and specifications.** A, B
8. **Apply ANSI dimensioning rules and standards.** A, B
9. **Draw floor plans, elevations, sections, basic wall construction details.** A, B, C, E
10. **Synthesize information from other coursework as applicable to studio projects.** A, B, C, D, E
11. **Present, orally and visually, a design solution.** C, E

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

**V. Evaluation:**

A. **Testing Procedures: 10% of grade**

   **Quizzes:**
   Announced quizzes will be given throughout the semester. The information to be covered on
each quiz will be announced in class prior to the quiz. A quiz can not be made-up for any reason. Quizzes will account for 10% of your final grade.

B. Laboratory Expectations: 40% of grade

Drafting Exercises: 10% of grade
Throughout the semester there will be assigned a series of drafting exercises. Not only will these exercises improve and perfect your drafting and lettering skills, but they will also provide valuable information on design and construction methods. These drafting exercises will account for 10% of your final grade.

Working Drawings: 30% of grade
As a culmination of all you have gleaned from the semester's design projects, you will complete a set of residential working drawings. These drawings will account for 30% of your final grade.

C. Field Work:

N/A

D. Other Evaluation Methods: 50% of grade

Projects:
A detailed description of each project will be given and the majority of the work for each project MUST be done in class. Many of the projects will have intermediate turn-ins in order to "stay on-track." All design work must be your own original work. These design projects will account for 50% of your final grade.
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.

E. Grading Scale:

Grade Breakdown:
Drafting Exercises 10%
Quizzes 10%
Projects 50%
Working Drawings 30%
Total 100%

Grading Scale:
A = 90—100
B+ = 87—89
B = 80—86
C+ = 77—79
C = 70—76
D+ = 67—69
D = 60—66
F = Below 60

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 (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.

**IDT 1500 Class 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, babysitter problems, or work scheduling problems do not constitute an excuse for an absence. You will be marked late at five minutes after the class is scheduled to begin. Habitual tardiness may result in the lowering of your final grade, and five tardies will equal one absence.

An absence is not an acceptable reason for failing to submit a project or other assignment that is due on the day of the absence. If a test, quiz, reading assignment, project, or exercise is due the next class period following an absence, you are still responsible for it. Two absences are permitted without penalty. Three absences will result in a penalty of one letter grade for the semester, and each additional absence will result in a penalty of one letter grade for the semester.

**B. Academic Dishonesty:**

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. MATERIALS LIST FOR IDT 1500:**

- Lead holder (at least one or one for each lead)
- 2 each leads: (H, 2H, 3H)
- Lead pointer
- Rapidograph pens (at least 0 and 1)
- Triangles: (inking will be used during the semester)
  - 30-60-90
  - 45
- Adjustable triangle (optional)
- Architects scale
- Drafting tape or dots
- Ames lettering guide
- Erasing shield
- White or yellow tracing paper (trash) 18” or wider
- Vellum 1000H
- 18 X 24 unbordered sheets OR by the roll
- Erasing pencil (white or pink pearl)
- Drafting brush
- 6” compass with detachable leg
- "Tackle box" to carry supplies
- Matt knife
- Scissors
- Retractable measuring tape (at least 25’ long)
- Templates
  - house plan
  - furniture
circle
ellipse
etc.
Blueprint paper (purchase as a class)
Additional supplies which will/may be needed later:
Matt board
Foam core
Metal cork-backed ruler longer than 18"
Sticky back
Dry mount tissue
Other equipment you may want to purchase:
Computer
Drafting table and parallel bar
Electric eraser/sharpener
Additional templates
Large triangles