

# ARCHITECTURAL DESIGN 3

## COURSE OUTLINE

Textbook: Architectural Design and Drafting Fourth Edition, by Jefferis & Madsen

Sections: 1-7

Supplemental textbooks – Architecture/Design, Engineering, Drawing; Architecture – residential drawing and design by Kicklighter; Architectural Styles by Wallach

### General Course Objectives

- ✓ Students will learn about healthy competition
- ✓ Students will further their lessons of working with others.
- ✓ Students will learn that there are rules that has to be followed in all projects
- ✓ Students will learn the projects from start to finish of what an architect does when presenting a huge project to a customer

### Course Outline

#### A. Review of CAD

1. Terminology of Computer-Aided Design and Drafting
2. Designing
3. The CADD workstation
4. Mobile Computers
- 5 Ergonomics
6. Architectural CADD symbols
7. Drawing on CADD layers
8. Web-Based Architectural Collaboration

#### B. Review Types of Drawings

1. Identify different drawing types
  - a. Floor Plans-computer
  - b. Elevations-computer
  - c. 3D computer generated model
  - d. Presentation Drawing
  - e. Perspective Drawing
2. Produce examples of each type of drawings

#### C. Construction Framing & Support

1. Balloon framing
2. Post and Beam framing
3. Platform framing
  - a. In-depth look at interior and exterior framing
4. Roof framing
5. Foundations
6. Sectional View

#### D. Group Stage

1. Break themselves up into groups of two or three
2. Will vote for the best two designs of the previously drawn houses
3. Vote for a team captain that will also double as secretary
4. Revise and create an accurate timeline
  - a. Date of the competition
  - b. Tentative date of completion of the first floor
  - c. Tentative date of completion of the second floor (if applicable)

#### E. Building Stage

1. Build a model house using the voted house plans
  - a. The model house will be built with but not limited to the following materials:
    - i. Balsa Wood
    - ii. Duco Cement Glue
    - iii. Crescent Board
    - iv. Paint
    - v. Doll House Wallpaper
    - vi. Doll House Flooring
  - b. The teacher must approve any other materials before usage
2. Keep a journal containing the following information:
  - a. Amount of materials used
  - b. Cost of all materials used
  - c. Cost of building the house in real life
  - d. Personal diary of the project
    - i. Can be done once a week
    - ii. All things that are done
    - iii. Any incidents that might have happened during the building stage
  - e. Put together a portfolio containing all the information needed for the contest
    - - (Project ends the week before TSA State Competition)

#### F. Color & the Design Process

1. Review Design Elements and Principles
2. Analysis the perception given by different color in rooms
3. Discuss furniture placement

#### G. Alternative & Energy Efficient Homes

1. Study alternative dwellings
2. Present a presentation about an alternative structure.

#### H. Final Presentation

1. Present an Advanced CAD 3D model.
2. Present a detailed Perspective or Presentation Drawing
3. Present a sectional view
4. Present Wood Model house

## Grading Policy

Students will be graded in the areas listed below, based on a standard points system.

Class work – Each assignment will be given an individual point value. Students will be made aware of that value when assignments are handed out.

Quizzes – 25 pts

Participation/Use of class time – 25pts each week

Projects – 50 Points

Final Project – 200 Points

Final Presentation – 100 Points