

WEST VALLEY COLLEGE
Course Outline

Department: Architecture

Course Number and Title: ARCH 056 - Basic Architectural Design

Length of course in weeks: 16

Units: 3

Total Class Hours/Week: 6

Lecture Hours/Week: 2

Lab Hours/Week: 4

Grade Type: Grade/Credit/No Credit

Catalog Description: This course is a study of the architectural design principles and methodologies. Students apply these principles to studio problems of increasing complexity. Various representation techniques are utilized, including sketching, manual drafting, computer graphics, and architectural model making.

Schedule Description: This course is a study of the architectural design principles and methodologies. Students apply these principles to studio problems of increasing complexity. Various representation techniques are utilized, including sketching, manual drafting, computer graphics, and architectural model making

Recommended Preparation:

MATH 103, Elementary Algebra or

MATH 103R, Elementary Algebra

Course Outcomes: Student Learning Outcomes

Outcome: Students will be able to design a basic level architectural project such as a simple apartment or a series of small townhouses.

Assessment: Final project presentation.

Course Objectives: Upon completion of this course the student should be able to:

1. Apply analytic techniques and problem-solving methodologies to simple program development.
2. Identify the elements of visual perception and language of visual design.
3. Develop compositions in both black and white color.
4. Identify the principles of design in an environmental design field.
5. Recognize the ramifications of working within the concepts of two-dimensional space planning and three-dimensional contexts.
6. Develop design judgment and the ability to verbally communicate this judgment to others.

Assessment: Students in this course will be graded base on the following four categories:

1. **Writing Assignments:** reading report(s)
2. **Problem Solving Demonstrations:** homework problems and basic architectural projects.
3. **Skill Demonstrations:** class performance(s) and exam performance(s)
4. **Examinations:** final project presentation.

Repeatability: 1 time

Methods of Instruction: Lecture & Lab

Lecture Content:

1. The elements and principles of design; “static” and “dynamic” compositional forms; symmetry and dynamic symmetry; object and field interdependency; harmony; rhythm; continuity; order and unity; scale and proportion; texture and color.	10.00 %
2. Primary elements of architectural design.	10.00 %
3. Form in architecture.	10.00 %
4. Space in architecture.	10.00 %
5. Programming techniques.	10.00 %
6. Site analysis techniques.	10.00 %
7. Computer software demonstration.	10.00 %
8. Axonometric drawing techniques.	10.00 %
9. Ergonomics and human scale.	10.00 %
10. Special topics.	10.00 %

Lab Content:

1. Explore various aspects of the basic architectural design, through design studies, such as exterior envelope, basic structural system, and interior space planning.	55.00 %
2. Use of (physical) models to study designs at various scales: for example, the overall site, the building, and the detail. A minimum of (3) three models are required.	45.00 %

Critical Thinking: Develop several design exercises, beginning with simple 2-d abstract visual compositions, leading towards simple architectural design problems of increasing complexity.

College Level Required Reading, Writing, and other Outside-of-Class Assignments:

Over a 16 week presentation of the course, three hours per week are required for each unit of credit. Two hours of independent work done out of class are required for each hour of lecture. Outside of the regular class time the students in this class will be doing the following outside of class:

- **Study:** 1.00 additional hour
- **Problem solving activity or exercise:** 1.00 additional hour
- **Practice Skills:** 1.00 additional hour
- **Required reading:** 1.00 additional hour

Textbook:

Ching Francis D. K. Architecture: Form, Space, & Order. 3rd ed. Wiley and Sons Inc., 2007. ISBN: 9780471752165