



El Camino College

COURSE OUTLINE OF RECORD - Official

I. GENERAL COURSE INFORMATION

Subject and Number: Architecture 199
Descriptive Title: Architecture Design Studio

Course Disciplines: Architecture

Division: Industry and Technology

Catalog Description: In this course, students learn how to balance the design constraints that architects face when solving architectural problems. Students will design and compose two and three dimensional drawings as well as build models to demonstrate their solutions. Projects will increase in size and scope each time the student takes the course.

Conditions of Enrollment: Prerequisite

Architecture 170
 AND

Architecture 171
 with a minimum grade of C in each prerequisite course

Course Length: Full Term Other (Specify number of weeks):
Hours Lecture: 2.00 hours per week TBA
Hours Laboratory: 6.00 hours per week TBA
Course Units: 4.00

Grading Method: Letter
Credit Status: Associate Degree Credit

Transfer CSU: Effective Date: Prior to July 1992
Transfer UC: Effective Date: Prior to July 1992

General Education:
El Camino College:

CSU GE:

IGETC:

II. OUTCOMES AND OBJECTIVES

A. COURSE STUDENT LEARNING OUTCOMES (The course student learning outcomes are listed below, along with a representative assessment method for each. Student learning outcomes are not subject to review, revision or approval by the College Curriculum Committee)

The above SLOs were the most recent available SLOs at the time of course review. For the most current SLO statements, visit the El Camino College SLO webpage at <http://www.elcamino.edu/academics/slo/>.

B. Course Student Learning Objectives (The major learning objective for students enrolled in this course are listed below, along with a representative assessment method for each)

1. Compare and contrast the design philosophies of famous architects (e.g. Frank Lloyd Wright's design philosophy was "buildings should be organic to the context of geographical location of the site" and Mies Van Der Rohe's design philosophy was "less is more").

No Assessment Selected

2. Graphically formulate an ordering system which is the basis for a circulation layout.

No Assessment Selected

3. Compare and contrast the difference between construction documents and conceptual schematic drawings.

No Assessment Selected

4. Collect and analyze data regarding environmental issues that have an impact on the orientation of the building.

No Assessment Selected

5. Design a building program based on information acquired from a city planning department and a building analysis of a similar type.

No Assessment Selected

6. Debate the basic conceptual ideas in presenting design projects.

No Assessment Selected

III. OUTLINE OF SUBJECT MATTER (Topics are detailed enough to enable a qualified instructor to determine the major areas that should be covered as well as ensure consistency from instructor to instructor and semester to semester.)

Lecture or Lab	Approximate Hours	Topic Number	Major Topic
Lecture	4	I	ORIENTATION A. Student contract B. Student projects
Lecture	10	II	HISTORICAL REVIEW OF MAJOR ARCHITECTURAL LANDMARK BUILDINGS A. Major architects and their work B. How to critically analyze buildings

			C. Major buildings from different periods
Lecture	10	III	PRIMARY GEOMETRIC ELEMENTS USED IN BUILDING DESIGN A. Point, line, plane, and volume B. Other geometric forms used in design C. Articulation of form
Lecture	6	IV	SPATIAL ORGANIZATION ORDERING PATTERNS A. Linear, circular, radial, grid, cluster B. Properties of forms and shapes C. Adjacent and interlocking spaces
Lecture	6	V	CIRCULATION ELEMENTS IN DESIGN A. Approach and entry to a site/building B. Configuration of the path C. Path to space relationship
Lab	6	VI	MODEL MAKING A. Massing models B. Presentation models C. Computer-generated models
Lab	6	VII	SCALE, RATIO AND PROPORTION A. Material and structural proportions B. Golden section C. Classical orders D. Visual versus human scale
Lab	12	VIII	PRINCIPLES A. Presentation principles B. Portfolio principles C. Final presentation of thesis project
Lab	10	IX	HISTORICAL REVIEW OF MAJOR ARCHITECTURAL LANDMARK BUILDINGS A. Powerpoint research and oral report of architects and the major buildings they have designed
Lab	10	X	PRIMARY GEOMETRIC ELEMENTS USED IN BUILDING DESIGN A. Designing a museum that has a circulation system that is based on location of sculpture/paintings
Lab	16	XI	SPATIAL ORGANIZATION ORDERING PATTERNS A. Creation of three different circulation designs for a proposed building design using linear, circular, radial, grid or cluster ordering patterns B. Designing adjacency bubble diagram for the proposed building design
Lab	16	XII	CIRCULATION ELEMENTS IN DESIGN A. Designing the entry of a building for pedestrian as well as automotive circulation B. Designing a building to incorporate all the spaces in the building program as part of the circulation system
Lab	16	XIII	MODEL MAKING A. Constructing a simple massive model of the volumes of a building that represents the program of spaces inside

			B. Constructing a digital model of a building on a computer C. Building a final presentation model of a building component at a large scale
Lab	16	XIV	SCALE, RATIO AND PROPORATION A. Designing a building where the scale is proportional to the functions inside of it and explaining the rationale behind the location of each space based on its function
Total Lecture Hours		36	
Total Laboratory Hours		108	
Total Hours		144	

IV. PRIMARY METHOD OF EVALUATION AND SAMPLE ASSIGNMENTS

A. PRIMARY METHOD OF EVALUATION:

Problem solving demonstrations (computational or non-computational)

B. TYPICAL ASSIGNMENT USING PRIMARY METHOD OF EVALUATION:

Design and build a model of a house that has scale, circulation, structure, enclosure systems, and environmental control systems incorporated into the design. Submit model to instructor for evaluation.

C. COLLEGE-LEVEL CRITICAL THINKING ASSIGNMENTS:

1. Compose a term paper that analyzes an important building in architectural history and critiques the primary conceptual elements through diagrams. Submit term paper to instructor for evaluation.
2. Create a drawing illustrating an environmental analysis of a site that describes how the elements have an effect on the shape and orientation of a building. Submit drawing to instructor for evaluation.

D. OTHER TYPICAL ASSESSMENT AND EVALUATION METHODS:

Class Performance

Term or other papers

Other (specify):

Drawings and models depicting the solution to a design problem

V. INSTRUCTIONAL METHODS

Laboratory

Lecture

Multimedia presentations

Other (please specify)

ALTERNATE INSTRUCTIONAL SITE

Note: In compliance with Board Policies 1600 and 3410, Title 5 California Code of Regulations, the Rehabilitation Act of 1973, and Sections 504 and 508 of the Americans with Disabilities Act, instruction delivery shall provide access, full inclusion, and effective communication for students with disabilities.

VI. WORK OUTSIDE OF CLASS

Required reading

Problem solving activities

Written work

Estimated Independent Study Hours per Week: 4

VII. TEXTS AND MATERIALS

A. UP-TO-DATE REPRESENTATIVE TEXTBOOKS

Frank Ching. ARCHITECTURE: FORM, SPACE, AND ORDER. 3rd ed. Van Nostrand Reinhold, 2007.

B. ALTERNATIVE TEXTBOOKS

C. REQUIRED SUPPLEMENTARY READINGS

D. OTHER REQUIRED MATERIALS

Architectural drafting and design tools

VIII. CONDITIONS OF ENROLLMENT

A. Requisites (Course and Non-Course Prerequisites and Corequisites)

Requisites	Category and Justification
Course Prerequisite Architecture-170 AND	Sequential
Course Prerequisite Architecture-171	Sequential

B. Requisite Skills

Requisite Skills
a. Understand building construction.
b. Graphically render a building using plan, section, elevation and perspective.
c. Draw the entourage, (people, landscaping, cars, furniture) needed in descriptive drawings.

C. Recommended Preparations (Course and Non-Course)

Recommended Preparation	Category and Justification
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D. Recommended Skills

Recommended Skills

E. Enrollment Limitations

Enrollment Limitations and Category	Enrollment Limitations Impact
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Course created by Michael Stallings on 02/01/1982.

BOARD APPROVAL DATE:

Last Reviewed and/or Revised by Vivian Nemie on 10/27/2009

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