College of San Mateo
Official Course Outline

1. **COURSE ID:** ARCH 220 **TITLE:** Design II: Architecture Design, Form and the Built Environment
   Units: 4.0 units **Hours/Semester:** 48.0-54.0 Lecture hours; 48.0-54.0 Lab hours; and 96.0-108.0 Homework hours
   Method of Grading: Letter Grade Only
   Prerequisite: ARCH 210, and completion of or concurrent enrollment in ARCH 140

2. **COURSE DESIGNATION:**
   Degree Credit
   Transfer credit: CSU; UC

3. **COURSE DESCRIPTIONS:**
   Catalog Description:
   Continuation of the architectural design studio methodology introduced in Arch 210. Introduction to the tactile, experiential, and ordering elements of architectural and environmental form as physical responses to specific needs and constraints. Design opportunities, lectures, and discussion include the presentation, development, and analysis of elemental architectural solutions and topics. Introduction of fundamental principles and opportunities in the design of elementary three dimensional architectural solutions and the making of buildings in response to specific program needs within defined constraints. Design exercises explore the development of building forms, circulation/movement, experiental quality of space, site analysis and the materiality of building solutions within the context of the problem solving process. Graphic processes and visual analysis combined with model building and freehand drawings and digital media are used for a more critical approach to problem solution and developed graphic expression. Design process issues, setting design goals and objectives and the creation of spatial settings for human use are critically investigated. Graphic supplies will be required. A materials fee in the amount shown in the Schedule of Classes is payable upon registration.

4. **STUDENT LEARNING OUTCOME(S) (SLO'S):**
   Upon successful completion of this course, a student will meet the following outcomes:
   1. Demonstrate social and artistic awareness and sensitivity in the context of environmental design issues.
   2. Carry out the design process, including elementary problem definition and understanding, setting of goals and objectives, development of solution seeking alternatives, evaluation, and execution.
   3. Analyze and define the constraints and opportunities of elementary design problem scenarios and begin to develop comparative and creative conclusions regarding conceptual solutions involving architectural form and space.
   4. Creatively manipulate architectonic elements and form to achieve elementary architectural and build environmental solutions from given or developed needs and requirements and within specific constraints.
   5. Recognize and use elementary qualities and ordering principles of architectural form, including shelter, enclosure, light, texture, place, solids/voids, hierarchy, proportion, unity, contrast and circulation/movement.
   6. Use mixed media graphic techniques and three dimensional models to express and present design concepts and solutions with a competent level of craft and care.

5. **SPECIFIC INSTRUCTIONAL OBJECTIVES:**
   Upon successful completion of this course, a student will be able to:
   1. Demonstrate social and artistic awareness and sensitivity in the context of environmental design issues.
   2. Carry out the design process, including elementary problem definition and understanding, setting of goals and objectives, development of solution seeking alternatives, evaluation, and execution.
   3. Analyze and define the constraints and opportunities of elementary design problem scenarios and begin to develop comparative and creative conclusions regarding conceptual solutions involving architectural form and space.
   4. Creatively manipulate architectonic elements and form to achieve elementary architectural and built environmental solutions from given or developed needs and requirements and within specific constraints.
   5. Recognize and use elementary qualities and ordering principles of architectural form, including shelter, enclosure, light, texture, place, solids/voids, hierarchy, proportion, unity, contrast and circulation/movement.
   6. Use mixed media graphic techniques and three dimensional models to express and present design concepts

and solutions with a competent level of craft and care.

6. **COURSE CONTENT:**
   Lecture Content:
   1. Definition of need, problem analysis definition
   2. Setting goals and objectives
   3. Research assignment
   4. Pattern languages, design methodologies
   5. Compositional elements and scale in architecture, analysis of the parts with the whole
   6. Architectural composition : kit of parts and development of a public place
   7. Habitation & architecture

7. **REPRESENTATIVE METHODS OF INSTRUCTION:**
   Typical methods of instruction may include:
   A. Discussion
   B. Guest Speakers
   C. Other (Specify): Design studio involves the presentation of concepts and subject principles with the hands-on exploration and development of creative work and design development, individually or in teams. Lecture and presentation of concepts and principles are combined with design problems / opportunities requiring design exploration, research and both verbal and graphic presentations with focused attention to historical, environmental and cultural considerations and the design process. In-progress and individual or group review of design and project progress of longer term assignments are intended to guide student and design development. Where appropriate, models and other three dimensional studies are utilized to reinforce analytic/aesthetic solutions as are readings and research problems with reports that require critical analysis. Periodic overlap and review of previously presented course work is used to reinforce understanding, retention, and appreciation of subjects presented. Design project topics reinforce thematic and core subjects of the course. Coursework fosters the development of making and communication skills in the process of design. Guest speakers, film and visual presentations can be introduced to the class to reinforce principles and concepts. Hours by arrangement are devoted to continued student work on project models and presentations. Students work in the architecture studio (currently 19-114) under the supervision of an architecture faculty member. In addition to receiving guidance from the faculty member, students benefit from observing and critiquing each other's work in progress. Many projects require tools and workspace that may not be available to students outside the studio.

8. **REPRESENTATIVE ASSIGNMENTS**
   Representative assignments in this course may include, but are not limited to the following:
   Writing Assignments:
   Design studio involves the presentation of concepts and subject principles with the hands-on exploration and development of creative work and design development, individually or in teams. Lecture and presentation of concepts and principles are combined with design problems/opportunities requiring design exploration, research and both verbal and graphic presentations with focused attention to historical, environmental and cultural considerations and the design process. In-progress and individual or group review of design and project progress of longer term assignments are intended to guide student and design development. Where appropriate, models and other three dimensional studies are utilized to reinforce analytic/aesthetic solutions as are readings and research problems with reports that require critical analysis.
   Reading Assignments:
   Selective readings from the textbook are assigned to reinforce or support the design topic(s) being explored in the studio lecture and lab. These may include concepts of architectural & spatial composition, the process of design, analyzing exemplar buildings and elements of human experience in architecture.

9. **REPRESENTATIVE METHODS OF EVALUATION**
   Representative methods of evaluation may include:
   A. Oral Presentation
   B. Oral and visual presentation of completed projects before faculty and peers. Written research papers and projects. Portfolio review at end of semester. Design projects will be evaluated on the quality of the concept, the development of concept, and the execution and presentation of the solution(s).

10. **REPRESENTATIVE TEXT(S):**
    Possible textbooks include:
    A. Erwine, Barbara. *Creating Sensory Spaces, The Architecture of the Invisible*, 1st ed. Routledge, 2016

B. Unwin, Simon. *Analyzing Architecture*, 4th ed. Routledge, 2014
C. Rasmussen, Steen Eller. *Experiencing Architecture*, ed. MIT Press, 1964

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Course Originator: Alena Reyes