### College of San Mateo

#### Course Outline

- **Course Title:** Design 2: Architecture: Design, Form and the Built Environment
- **Units:** 4
- **Total Semester Hours:** Lecture: 48, Lab: 48, Homework: 48, By Arrangement: 48

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<th>Department: Arch</th>
<th>Number: 220</th>
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#### Course Description:

Minimum of 48 hours of lecture and 48 lab hours plus 48 hours by arrangement per week. Prerequisite: Arch 210; completion of or concurrent enrollment in Arch 140. 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 and circulation/movement and experiential quality of space and 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 as shown in the Schedule of Classes is payable upon registration. (Spring only.) (AA, CSU, UC)
5. **Class Schedule Description** (Include prerequisites/corequisites/recommended preparation. For format, please see model course outline.)

Continuation of the architectural design studio methodology introduced in ARCH 210. Introduces the design student to 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 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 as shown in the Schedule of Classes is payable upon registration. Plus three hours by arrangement per week. Prerequisite: Arch 210; completion of or concurrent enrollment in Arch 140. (Spring only.) (AA, CSU, UC)

6. **Student Learning Outcomes** (Identify 1-6 expected learner outcomes using active verbs.)

Upon successful completion of the course, the student will be able to:

- Demonstrate social and artistic awareness and sensitivity in the context of environmental design issues.
- Carry out the design process, including elementary problem definition and understanding, setting of goals and objectives, development of solution seeking alternatives, evaluation, and execution.
- 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.
- 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.
- 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.
- 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.

7. **Course Objectives** (Identify specific teaching objectives detailing course content and activities. For some courses, the course objectives will be the same as the student learning outcomes. In this case, “Same as Student Learning Outcomes” is appropriate here.)

Same as student learning outcomes.

8. **Course Content** (Brief but complete topical outline of the course that includes major subject areas [1-2 pages]. Should reflect all course objectives listed above. In addition, a sample course syllabus with timeline may be attached.)

Definition of need, problem analysis definition

Setting goals and objectives
Research assignment
Pattern languages, design methodologies
Compositional elements and scale in architecture, analysis of the parts with the whole
Architectural composition: kit of parts and development of a public place
Habitation & architecture

9. Representative Instructional Methods (Describe instructor-initiated teaching strategies that will assist students in meeting course objectives. Describe out-of-class assignments, required reading and writing assignments, and methods for teaching critical thinking skills. If hours by arrangement are required, please indicate the additional instructional activity which will be provided during these hours, where the activity will take place, and how the activity will be supervised.)

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.

10. Representative Methods of Evaluation (Describe measurement of student progress toward course objectives. Courses with required writing component and/or problem-solving emphasis must reflect critical thinking component. If skills class, then applied skills.)

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).

11. Representative Text Materials (With few exceptions, texts need to be current. Include publication dates.)

Experiencing Architecture, Steen Eiler Rasmussen, MIT Press, 1964

Prepared by: ______________________________