College of San Mateo Official Course Outline

 COURSE ID: ARCH 140 TITLE: Architecture + Design Drawing II: Design Communication Units: 2.0 units Hours/Semester: 16.0-18.0 Lecture hours; 48.0-54.0 Lab hours; and 32.0-36.0 Homework hours Method of Grading: Letter Grade Only

Method of Grading: Letter Grade Only **Prerequisite:** ARCH 120

2. COURSE DESIGNATION:

Degree Credit Transfer credit: CSU; UC

3. COURSE DESCRIPTIONS:

Catalog Description:

Basic techniques used in the graphic communication of architects and environmental designers. Develops the student's ability to visualize and graphically express forms and spaces in two and three dimensions. Use of orthographic, paraline, and perspective drawing in both black/white and color media. Introduction of digital media to create 3-D model. Use of essential principles of pictorial space, methods of delineation, and mixed media techniques. Graphic supplies required. (Spring only)

4. STUDENT LEARNING OUTCOME(S) (SLO'S):

Upon successful completion of this course, a student will meet the following outcomes:

- 1. Produce freehand drawings of observed objects/building elements using contour and full tone and using the fundamentals of one and two point perspective.
- 2. Develop plan, elevation and section views of an architectural subject using orthographic projections and essential architectural conventions to scale.
- 3. Read multiview drawings and interpret graphic language into pictorial drawing (axonometric).
- 4. Develop Paraline drawings: Axonometric and Elevation Oblique or Plan Oblique, to scale.
- 5. Produce a 3-D computer model of an object.
- 6. Produce Presentation drawings using color, mixed media, and digital rendering techniques in the communication of architecture.

5. SPECIFIC INSTRUCTIONAL OBJECTIVES:

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

- 1. Produce freehand drawings of observed objects/building elements using contour and full tone and using the fundamentals of one and two point perspective.
- 2. Develop plan, elevation and section views of an architectural subject using orthographic projections and essential architectural conventions to scale.
- 3. Read multiview drawings and interpret graphic language into pictorial drawing (axonometric).
- 4. Develop Paraline drawings: Axonometric and Elevation Oblique or Plan Oblique, to scale.
- 5. Produce a 3-D computer model of an object.
- 6. Produce Presentation drawings using color, mixed media, and digital rendering techniques in the communication of architecture.

6. COURSE CONTENT:

Lecture Content:

- 1. Overview of types of Drawings and Graphic communication;
- 2. Contour drawing, Tone ft Texture;
- 3. Perspective Drawing: 1 ft 2 point, space and depth cues;
- 4. Othographic Drawing: Plan, Elevation and Section to scale;
- 5. Multiview Drawings: Reading plan and elevations and interpreting into axonometrics;
- 6. Paraline Drawing: Axonometric and Elevation Oblique or Plan Oblique, to scale;
- 7. Intro to 3-D modeling application;
- 8. Presentation drawing: Use of color, mixed media and digital rendering techniques in the communication of architecture.

Lab Content:

Lab content follows lecture schedule regarding design graphic content with specific exercises for each topic carried out in the studio environment with instructor review and critique.

7. REPRESENTATIVE METHODS OF INSTRUCTION:

Typical methods of instruction may include:

- A. Lecture
- B. Lab
- C. Critique
- D. Other (Specify): The semester's work is divided between instruction and assignments to be completed in class. Instruction is structured to help the student understand the intent and expected results of the drawings produced. Lectures include presentation of graphic examples, techniques and methods. Assignments provide an ongoing check of student/ class progress and competency.

8. REPRESENTATIVE ASSIGNMENTS

Representative assignments in this course may include, but are not limited to the following:

Writing Assignments:

Varied graphic exercises advancing architectural communication by hand, mechanical & digital means.

Reading Assignments:

Chapter reading assignments from the textbook following the course content and lectures.

9. REPRESENTATIVE METHODS OF EVALUATION

Representative methods of evaluation may include:

- A. Class Participation
- B. Class Performance
- C. Class Work
- D. Homework
- E. Lab Activities
- F. Projects
- G. Effort, participation, and improvement. Appraisal of student's in-studio work. Graded drawing assignments. Final review and critique.

10. REPRESENTATIVE TEXT(S):

Possible textbooks include:

- A. Ching, F. D. K.. Architectural Graphics, 6th ed. Wiley, 2015
- B. Ching, Francis. Design Drawing, 3rd ed. Wiley, 2019

Origination Date: September 2020 Curriculum Committee Approval Date: September 2020 Effective Term: Fall 2021 Course Originator: Alena Reyes