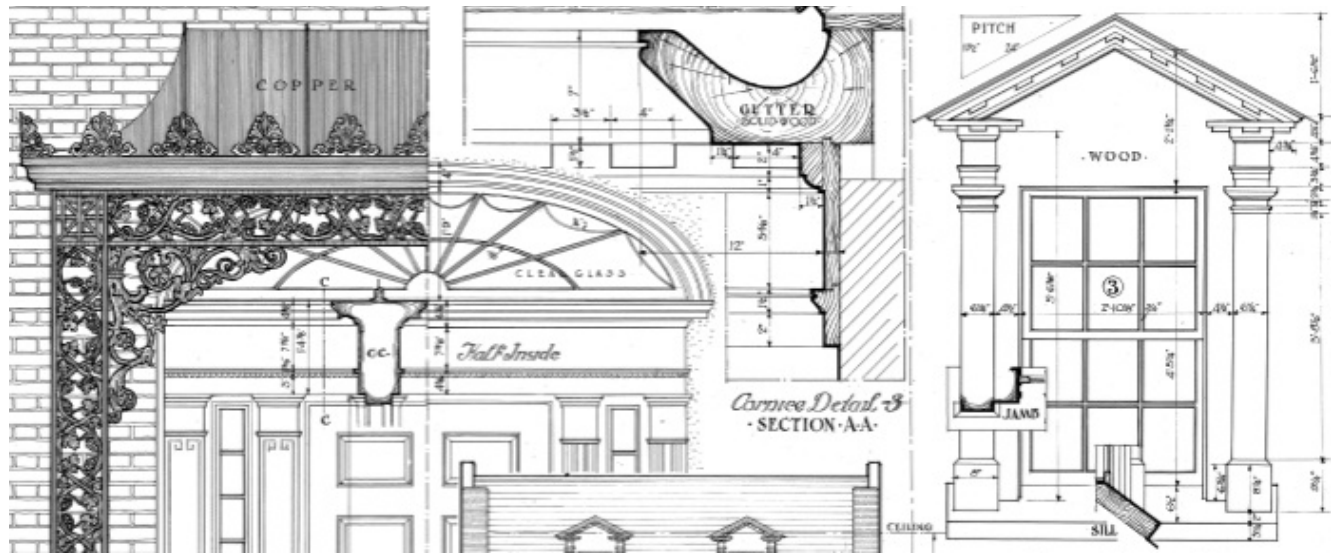


Clatsop Community College
DRF 150: Construction Drawing
Winter 2014
3 Credit Hours

Instructors: John Goodenberger and Lucien Swerdloff
Location: Towler 308
Time: Thursday 6:00-8:50pm



Course Description

Introduction to tools and techniques of sketching and drafting for architecture. Students develop skills to communicate designs for construction and renovation projects including scaling, projection, types, plans, elevations, sections, pictorial drawings and drawing conventions. Traditional and computer aided drafting techniques are introduced.

Students will learn the basic terms, concepts and techniques of construction drawing and use orthographic projection techniques to construct multiview drawings. They will measure and sketch existing buildings and details to communicate construction information. Hands-on exercises will provide opportunities to apply drafting skills to create and layout a set of building construction documents.

Course Learning Outcomes

After completing this course, students will be able to:

- Describe the relationship between drawing and construction.
- Identify the different types of construction drawings.
- Use traditional and computer aided drafting techniques to produce basic construction drawings.
- Use drawing to communicate ideas and intentions.

Methodology

Class will meet for one 3 hour session per week. Class meetings will generally consist of presentations, discussions, demonstrations and studio. Students will be required to do a number of exercises throughout the term and a project. Presentations and demonstrations given during class will provide a basis for the exercises. Students should expect to spend at least 3 hours per week outside of class time to work on exercises. There will be required field trips.

Instructor Information

John Goodenberger

Email: jgoodenberger@clatsopcc.edu

Lucien Swerdloff

Office Hours: MW 1:00-2:00 – IMTC Computer Lab (MERTS Campus)

TT 4:00-5:00 – Art 102 (Main Campus)

F 12:00-1:00 – Art 102 (Main Campus)

Phone: 503.338.2301

Email: lswerdloff@clatsopcc.edu

Required Text

Architectural Graphics, Fifth Edition, Francis D. Ching, John Wiley & Sons, Inc., 2009.

Required Materials

Sketch pad and pencils. Drafting Kit (available in college bookstore).

Attendance and Participation

Attendance and participation in all classes is strongly recommended and necessary for successful completion of the course and learning of material. The learning of a construction drawing requires time, practice and patience. The course will introduce many topics. It will be necessary to spend a considerable amount of time working on drawing exercises and interacting with other students in order to grasp the techniques and concepts covered.

Online

Blackboard: <http://bb4.clatsopcc.edu>

Email/SkyDrive: <http://home.live.com/>

Email Address: as specified in MyCCC

Login information:

UserName: first initial, last name, last four digits of student ID (e.g. jdoe999)

Password: birthday in format YYYYMMDD (e.g. 19881204)

Grading

Exercises will be graded for content, completeness and presentation that demonstrate an understanding of the issues covered. All exercises and readings will be due at the beginning of class on the specified due date. Class participation, attendance and initiative will be considered in the evaluation process.

Grading will be determined as follows:

- Exercises 60%
- Quizzes 20%
- Presentation 20%

Useful Resources

Building Construction Illustrated, 2nd Edition, Francis D. Ching

Recording Historic Structures, 2nd Edition, John A. Burns

Graphic Guide to Frame Construction, Rob Thallon

Architectural Graphic Standards, 11th Edition, AIA

A Visual Dictionary of Architecture, Francis D. Ching

Autodesk web site <http://www.autodesk.com>

Google sketchup web site: <http://www.sketchup.com>

SCHEDULE

1. (9 Jan.) Introduction, Architectural Drawing

Basics of construction document layout, historic and current drawings, review of drafting tools and use, drawing systems

Exercise 1: Architectural drawing

Read: Chapters 1 and 2

2. (16 Jan.) Multiview Drawings

Concepts of multiview drawings, orthographic projections, drawing types (plans, elevations, sections)

Exercise 2: Orthographic drawings

Read: Chapters 3 and 4

3. (23 Jan.) Paraline Drawings, Perspective Drawings

Concepts of paraline drawings, drawing types (axonometrics, obliques), introduction to perspective drawings

Exercise 3: Paraline drawings

Read: Chapters 5 and 6

4. (30 Jan.) Building Documentation, Quiz 1

Building documentation process (measuring, field sketches, field notes), HABS/HAER/HALS, eportfolio review

Exercise 4: Measured field drawings

Read: Reading packet

5. (6 Feb.) Site Visit: Oceanview Cemetery

Take field measurements, create field notes and create field sketches

Exercise 5: Field work: plan and elevations

6. (13 Feb.) Plans and Elevation

Drawing plans and elevations

Exercise 6: Plan and elevation

Read: Reading packet

7. (20 Feb.) Site Visit: Oceanview Cemetery

Take field measurements, create field notes and create field sketches

Exercise 7: Field work: section and detail

Read: Chapter 10

8. (27 Feb.) Sections and Details, Presentations

Drawing sections and details

Exercise 8: Drawing layout

Read: Chapters 7 and 9

9. (6 Mar.) CAD Introduction

Introduction to CAD systems for drawing and 3D modeling, site documentation

Exercise 9: Site drawing

Read: Chapter 8

10. (13 Mar.) Presentation

Presentation drawings

Exercise 10: Presentation drawing

11. (20 Mar.) Finals Week, Quiz 2

Final presentation

Notes: Readings should be done prior to week's classes. Changes may be made to the above schedule as necessary. Field trips may be scheduled earlier than class time due to availability of daylight.