

Clatsop Community College

## BLD 140: Print Reading for Construction

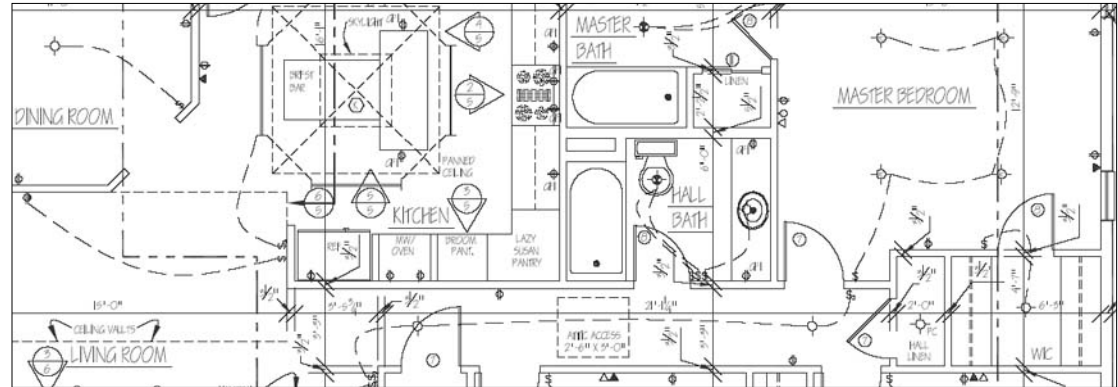
Fall 2013

3 Credit Hours

Instructor: Lucien Swerdloff

Location: IMTC Computer Lab

Time: Wednesday 5:00-7:50



### Course Description

Students learn and apply the principles of reading and interpreting construction prints. They learn the purpose of different types of drawings, the types of projections, applications of math, and the use of conventions, scales, symbols, notes, schedules and dimensions in construction drawings.

### Course Learning Outcomes

After completing this course, students will be able to:

- Describe and use the basic terms and concepts used in construction drawings.
- Identify the purpose and types of drawings in a set of working drawings.
- Understand the concepts of orthographic projections, identify orthographic views and describe their relationship to the three-dimensional objects they represent.
- Recognize and interpret pictorial drawings.
- Use mathematical skills to efficiently calculate data from drawings.
- Identify and define linetypes, symbols and abbreviations commonly used in construction drawings.
- Understand the use of scale in drawings, and measure drawing information using an architect's scale.
- Interpret dimensions and notes in drawings.
- Interpret graphic and text information on plot plans, floor plans, elevations, sections and details.
- Use basic types of sketches, including orthographic, isometric, oblique and perspective, to communicate design information.
- Assimilate knowledge gained in this course to interpret information in a comprehensive set of plans.

### Methodology

This course meets for one three hour session per week. Classes will consist of lecture and lab. Lectures will consist of presentations, discussions, and demonstrations. Lab will be used for review and work time, providing extensive hands-on experience. Students will be required to do a number of exercises throughout the term. Students should expect to spend three hours per week outside of class time to complete work.

### Required Text

*Printreading for Residential Construction, 5th Edition*, Thomas Proctor and Leonard Toenjes, American Technical Publishers, 2010.

### Required Materials

Sketch pad and pencils. Architect's scale.

### Supplemental Material

The following material can be checked out from the IMTC office:

- Video set and CD.
- *Print Reading for Construction*, Brown and Brown, Goodheart-Willcox, 2005.
- *Print Reading for Industry*, Brown and Dorfmuehler, Goodheart-Willcox, 2002.
- *Welding Print Reading*, Walker and Polanin, Goodheart-Willcox, 2007.
- *Reading Blueprints*, Nussbaum and Orr, TPC Training Systems, 2001.

### 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

Grading will be determined as follows:

- Sketching/review questions .....25%
- Competency exams .....25%
- Exercises .....25%
- Final .....25%

### Attendance and Participation

Attendance and participation in all classes is strongly recommended and necessary for successful completion of the course and learning of material. Class times will be used to introduce and discuss material, provide students with hands-on work time and allow interaction between students.

### Instructor Information

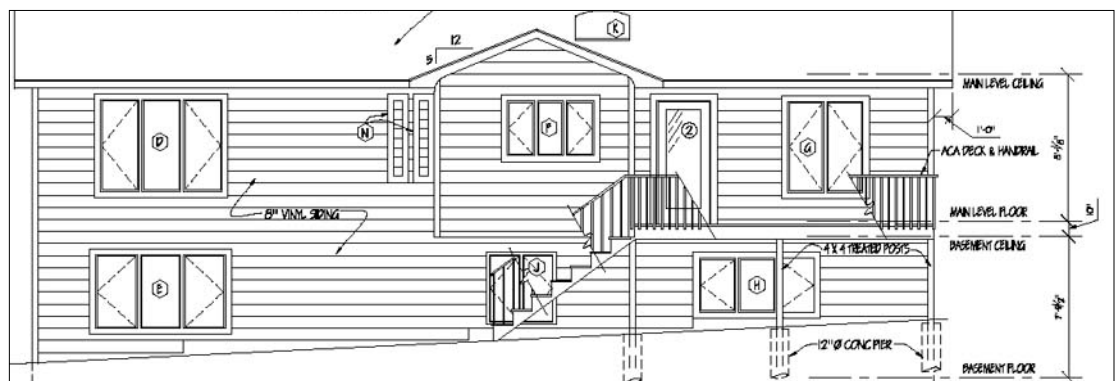
Office Hours: MW 1:00-2:00 – IMTC Computer Lab (MERTS Campus)

TT 4:00-5:30 – Art 102 (Main Campus)

F 12:00-1:00 – Art 102 (Main Campus)

Phone: 503.338.2301

Email: [lswerdloff@clatsopcc.edu](mailto:lswerdloff@clatsopcc.edu)



## **SCHEDULE**

### **1. Construction drawings and prints**

Wed 2 October: introduction, drawings, prints, drafting

Class: print reading exercise, review questions

Exercise 1: print reading

### **2. Working drawing concepts**

Wed 9 October: drawing types, projections, scale, sketching

Class: sketching, review questions

Exercise 2: projections

### **3. Trade math**

Wed 16 October: math concepts, geometry, area, volume

Class: review questions

Exercise 3: practical math

### **4. Symbols and abbreviations**

Wed 23 October: symbols, abbreviations

Class: CAD symbols, sketching, review questions

Exercise 4: symbols

### **5. Plot plans**

Wed 30 October plot plans, contours

Class: sketching, review questions

Exercise 5: plot plans

### **6. Floor plans**

Wed 6 November: floor plans, CAD drawings

Class: sketching, review questions

Exercise 6: floor plan

### **7. Elevations**

Wed 13 November: elevations

Class: sketching, review questions

Exercise 7: elevations

### **8. Sections**

Wed 20 November: sections, types of construction

Class: sketching, review questions

Exercise 8: sections

### **9. Review**

Wed 27 November: review

### **10. Details**

Wed 4 December: detail drawings

Class: sketching, review questions

Exercise 9: details

### **11. Printreading project**

Wed 11 December: conclusion

Class: final exam