

Instructor: Ric Costin
Phone: (541) 917-4773
CAD Lab: Ric Costin
Office Hours: Tuesday & Thursday afternoons
1:00 ~ 2:00, or by appointment.

Office: IA 237B
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Phone: (541) 917-4773

Course Goals and Objectives:

Students will gain an understanding of drawing piping, mechanical and electrical schematic diagrams and pictorial layouts. Students will demonstrate competency in creating logic diagrams, electronic and piping symbols, printed circuit boards and schematics. Students will also develop skills in piping, plumbing and HVAC drawing standards and practices.

Required Text and Supplies:

Process Pipe Drafting, T.M. Shumaker, Goodheart-Willcox (**PPD**)
Electronics Drafting, J. Frostad, Goodheart-Willcox (**ED**)

Evaluation:

A: 100-90%
B: 89~80%
C: 79~70%
D: 69~60%
F: 59% or below

Grade Weighting

Assignments: 40%
Tests & Quizzes: 60%

IN: By signed agreement, student requested. All coursework to be made up within a term.
Y: Not enough coursework completed to warrant grading

Miscellaneous:

- **Success** in this program is easily attainable through the following:
 - Attend promptly every day
 - Inform the instructor of missed classes in advance
 - Work to the best of your ability
 - Be prepared
 - Conduct yourself respectfully
 - Care about what happens in class
- If you miss a class you are responsible for assignments and due dates.
- All homework is due at the end of class.
- Late homework is not accepted. For more information and exceptions, see the [late policy](#).
 - Exceptions may be made due to illness/accidents or other unusual circumstances
 - Late homework may be taken due to pre-planned events but **arrangements must be made in advance**
- NO LATE HOMEWORK WILL BE TAKEN AT THE FINAL.
- Extra credit will boost the assignment portion of your grade. Extra credit applies after regular homework only, no late extra credit will be taken.
- All homework is unique and original work created by the person named on the drawing for whom the homework is being turned in by. No part of the homework, except group projects, shall be copied, duplicated, shared or in any way represent work done by someone else.
- Students who may need accommodations due to documented disabilities, or who have medical information which the instructor should know, or who need special arrangements in an emergency, should speak with the instructor during the first week of class. If you believe you may need accommodations, but are not yet registered with CFAR, please go to <http://linnbenton.edu/cfar> for steps on how to apply for services or call 541-917-4789.

Lab Policies and Procedures:

You are required to keep both your computer and workstation area clean and orderly. You will be checked periodically and without warning, so keep a professional looking workplace. You are expected to know and follow all lab policies, both written and implied.

Course Outline: (Note: This may change and is not all inclusive)

Week 1:	Pipe Overview & Fittings	PPD: 1, 2
Week 2:	Valves & Pumps	PPD: 3, 4
Week 3:	Equipment & Flow Diagrams	PPD: 5
Week 4:	Plans & Elevations	PPD: 6
Week 5:	Isometrics & Spool Diagrams	PPD: 8, 9
Week 6:	HVAC, Midterm	Handout
Week 7:	Print reading, Fundamentals, Diagrams	ED: 1, 2
Week 8:	Symbols & Diagrams	ED: 3, 4, 5
Week 9:	Circuit Boards	ED: 6, 7
Week 10:	Enclosures & Pictorial Drawings	ED: 8 & 9
Week 11:	Final, Tuesday, 12:30p-3:20p	

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