



# ENGR248

## Engineering Graphics

### Mechanical:

### Online Version

Instructor: Perry Carmichael

E-Mail: [perry.carmichael@linnbenton.edu](mailto:perry.carmichael@linnbenton.edu)

Zoom: <https://linnbenton.zoom.us/j/5419174774>

IA&Co-Host: Ric Costin

Zoom: <https://linnbenton.zoom.us/j/5419174773>

Office Hours: Monday~Thursday 9 to 10:00am, Friday 10am to Noon or by appointment

#### Course Goals and Objectives:

Students will gain an understanding of 3-D modeling and drawing creation using Solidworks. Students will learn to produce drawings using proper techniques, symbols, nomenclature and styles as described by current ASME/ANSI standards. Students will gain a sense of work ethic and time management skills by producing technical drawings within set time frames.

#### Text and Supplies:

**Required:** Computer capable of using Solidworks and the 2019-2020 student version of Solidworks, Internet connection, Dropbox account, Zoom meeting software. Dual monitors are recommended.

**Optional:** Solid Works for Designers, Sham Ticoo, CADCIM Technologies

#### Evaluation:

A: 100-90%

B: 89~80%

C: 79~70%

D: 69~60%

F: 59% or below

#### Grade Weighting

Assignments: 30%

Tests & Quizzes: 70%

Note: Final is optional. Your course grade will be based on all work up to that point

IN: By signed agreement, student requested. All coursework to be made up within a term.

#### Outcomes:

- Create orthographic projections
- Create engineering drawings to proper drafting standards using Solid Modelling/CAD software
- Dimension engineering drawings to proper drafting standards

#### Miscellaneous:

- **Success** in this class is easily attainable through the following:
  - Attend and login to Zoom 5 minutes early and promptly every day
  - 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 before the beginning of class on Wednesday. Google *Date Modified* data will be used as timestamp. Any assignments not turned in on time or before, determined by the timestamp, will be considered late.
- Late homework is accepted under strict guidelines. 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**
- 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. Any duplicated or otherwise copied drawing will be given a grade of 0 for each person.
- 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.

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

- Week 1: Basic Sketching
- Week 2: Sketch Editing & DIMs, Relations; Sketch & Base Features
- Week 3: Reference Geometry, Features 2; Placed Features-1
- Week 4: Placed Features-2; Editing Features
- Week 5: Loft & Sweep; Midterm
- Week 6: 3D Sketches & Parts; Assemblies & Drawings
- Week 7: Basic Part Drawings; Drawing Views
- Week 8: Advanced Drawings; Weldments
- Week 9: Holiday Monday; Sheetmetals
- Week 10: Stress Analysis; Final (optional) Wednesday