

Instructor: Perry Carmichael

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CAD Lab: Ric Costin

Office Hours: Tuesday 10-12 & Thursday 11-12 or by appointment.

Office: IA 231C

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Course Goals and Objectives:

Students will gain an advanced understanding of 3-D drafting and drawings using SolidWorks with an introduction to Rapid Prototyping. Students will learn to produce drawings using proper techniques, symbols, nomenclature and styles as described by current ANSI standards. Students will gain a sense of work ethic and time management skills by producing technical drawings within set time frames. Students will gain an understanding of team design processes and customer interaction.

Text and Supplies:

Required: Solid Works for designers 2017, Sham Ticoo, CAD/CIM technologies, Red Pen

Optional: Pocket Ref, T. J. Glover, Sequoia Publishing

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.

No food or drink in the lab! No headphones during class time!

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

Week 1: Solidworks Overview, Basic Sketching, Editing, Relations

CH. 1,2,3,4

Week 2: Drawing Template, Base Features, Reference Geometry

CH. 5,6

Week 3: Border, Placed Features

CH. 7

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| Week 4: Patterned Features, Editing Features | CH. 8, 9 |
| Week 5: Midterm, Basic drawings | CH. 14, 15 |
| Week 6: Section and other drawing views, Sweep, Loft, 3D Sketches | CH. 15, 10 |
| Week 7: Configurations, | CH. |
| Week 8: Basic Assemblies | CH. 12 |
| Week 9: | CH. |
| Week 10: Final Project | |
| Week 11: Final Wednesday, 9a-11:50a | |