

Engineering Graphics with CAD

Spring 2022

Instructor: Mark Holdhusen, Ph.D.
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Office Hours:

- Wausau MTW 11:00-12:00
- Marshfield R 12:00-1:00
- Stevens Point F 11:00-12:00

Description:

An introductory course in engineering graphics focusing on graphical communication. Topics include descriptive geometry elements, visualization, engineering drawing techniques, orthographic projection, pictorial representation, auxiliary and section views, and basic dimensioning. The course incorporates computer aided drafting (CAD) with engineering applications using 2-D drawing and 3-D modeling techniques.

Text:

- Tools for Design Using AutoCAD 2022 and Autodesk Inventor 2022 by Randy Shih

Course Website:

We will be using Canvas for the website in the course. The URL is <https://www.uwsp.edu/canvas> and you login using your UWSP username and password. The labs can be found there as well as the grades.

- This class is a hybrid format so much of the course is online at the above website.

Meeting Times:

- Monday - Wausau - Room 146 - 9:00AM - 10:50AM
- Thursday - Marshfield - Room 404F - 3:00PM - 4:50PM
- Friday - Stevens Point - Science Building B228 - 12:00PM - 1:50PM
- All meetings also in Zoom, check Canvas for link

Free Software:

Go to <http://students.autodesk.com> to download AutoCAD and Inventor for free. All you need is a school-issued email address from a college or university.

Grading:

- 70% - Labs: Labs are due nearly every week. All CAD labs must be uploaded to Canvas by the time posted. **Late assignments will not be accepted.**
- 30% - Inventor Lego Project – more details to follow

Academic Misconduct:

Academic misconduct is an act in which a student seeks to claim credit for the work or efforts of another without authorization or citation. Examples of academic misconduct include submitting a paper or assignment as one's own work when a part or all of the paper or assignment is the work of another or knowingly and intentionally assisting another student in an arrangement whereby any work, classroom performance, examination or other activity is submitted or performed by a person other than the student under whose name the work is submitted or performed.

Any student found engaging in academic misconduct on an assignment will receive the disciplinary sanction of receiving a failing grade on the assignment. If such an academic misconduct occurs again during the semester, the student will receive a failing grade in the course.

Course Schedule:

Week	Topics	Due
1	Sketching Multiviews and Dimensions	1-Feb
2	AutoCAD Fundamentals Chapter 1	8-Feb
3	AutoCAD Object Construction Chapter 2	15-Feb
4	AutoCAD Geometric Construction Chapter 3	22-Feb
5	AutoCAD Multiviews Chapter 4	1-Mar
6	AutoCAD Dimensioning Chapter 5	8-Mar
7	Inventor Parametric Modeling Chapter 7	15-Mar
8	Inventor Constructive Solid Geometry Chapter 8	29-Mar
9	Spring Break	
10	Inventor Model History Tree Chapter 9	5-Apr
11	Inventor Parametric Constraints Chapter 10	12-Apr
12	Inventor Parent/Child Relationships Chapters 11&12	19-Apr
13	Inventor Part Drawings Chapter 13	26-Apr
14	Inventor Symmetrical Features Chapter 14	3-May
15	Inventor Assembly Modeling Chapter 16	10-May
16	Inventor Final Project	18-May