

West De Pere High School
Technology Education Department

UWGB/NWTC Fundamentals of Drawing

Instructor: Mr. Karban
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Course Description:

This is an introductory course in Computer Aided Drafting and design for those students who plan to attend vocational, technical and engineering colleges. The students will use the latest version of AutoCAD and Solidworks to learn how to accurately model parts, machines, and mechanisms. They will use the CAD software to create parts, assemblies, and production drawings. Students will have the opportunity to become nationally accredited by becoming a **Certified Autodesk User** upon successful completion of this course.

Course Objectives:

Upon completion of this course students will be able to:

- A. be able to identify many career possibilities related to the fields of drafting
- B. be able to demonstrate sketching skills and techniques
- C. be able to apply principles of drafting to both traditional drafting and CAD
- D. be able to identify and use basic drafting equipment
- E. be able to make accurate measurements using drafting scales
- F. be able to solve problems using basic geometric construction
- G. be able to use and define orthographic projection
- H. be able to apply the general rules for dimensioning and tolerances to drawings
- I. be able to draw the different types of section, auxiliary, assembly, working, and pictorial drawings
- J. be able to create various patterns, fitting, and manufacturing processes for numerous parts

Course Skills/ Outline:

- 1. Sketching
- 2. Views
- 3. AutoCAD Interface
- 4. Basic Drawing and Editing
- 5. Drawing Precision
- 6. Editing
- 7. Layer development
- 8. Advanced Drawing Techniques
- 9. Advanced Editing
- 10. Blocks
- 11. Complex Objects

12. Layout and Printing
13. Solidworks Interface
14. Introduction to Sketching
15. Basic Part Modeling Tools

Attendance and Make-up work:

Much of the content in this course is sequential; therefore, it is expected that you will attend each class period. Not being present for demonstrations will prevent you from properly completing laboratory activities and/ or could become a safety hazard for you and those around you.

Activities and assignments are expected to be turned in on time at the beginning of the class period. A 10 % point reduction will be assessed per class period for late assignments. Late work as a result of an excused absence is due: 1) prior to absence if it is pre-excused and assignment/ due date is known; 2) upon return if assignment/ due date was known prior to absence; 3) after and equal amount of time as absence if assignment/ due date was given during absence.

***Remember that it is very important to always turn in assignments!!!

Evaluation:

The grade earned in this course will be determined by the quality of student work based on the parameters outlined by the instructor. Students will be evaluated on several laboratory projects and activities, quizzes, exams, and participation.

Grade distribution

- Assigned Lab activities and projects 50%
- Participation 30%
- Discussions
- Safety
- Clean-up / Misc.
- Exams and Quizzes 20%

Grade Scale

92-100	A	72-77	C
90-91	A-	70-71	C-
88-89	B+	68-69	D+
82-87	B	62-67	D
80-81	B-	60-61	D-
78-79	C+	0-59	F

Lab Clean-up Procedures:

- SAVE WORK, log off username
- Any tools or equipment used must be cleaned and put away
- All table tops will be brushed off
- NOBODY will leave the room until the instructor approves all stations

No eating or drinking in laboratory without instructor's permission.