

West De Pere High School
Technology Education Department

UWGB/ NWTC Parametric Modeling

Instructor: Mr. Glinski
Office: B 153
Phone: 338-5200 ext. 4310

Course Description:

This is a course in advanced computer aided design for those students who plan to attend vocational, technical and engineering colleges. The students will use the latest version of Solidworks to learn how to accurately model parts, machines, and mechanisms. They will use the CAD software to create parts, assemblies, and production drawings with an emphasis on casting and forging projects. Students will have the opportunity to become Certified Solidworks Associates upon successful completion of this course.

Course Objectives:

Upon completion of this course students will be able to:

- Describe all design aspects of a mechanical drawing
- Demonstrate how to accurately define a drawing/ part
- Use Solidworks Part, Assembly, and Drawing components to pass the CSWA Exam.
- Demonstrate basic knowledge of how parts are manufactured. (i.e. draft on a casting)

Course Skills/ Outline:

1. Solidworks Basics and User Interface
2. Introduction to Sketching
3. Basic Part Modeling
4. Symmetry and Draft
5. Patterning
6. Revolved Features
7. Shelling and Ribs
8. Editing and Repairing
9. Design Changes
10. Configurations
11. Using Drawings
12. Modeling
13. Assemblies
14. Using Evaluations
15. Manufacturing processes

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 classroom and laboratory activities

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
 - Clean-up / Misc.
 - ****GAMES****
- Exams and Quizzes 20%
 - Solidworks Certified Associate Exam

Grade Scale

Weighted Grades (UWGB only)

A = 5.0 A- = 4.67 B+ = 4.33 B = 4.0 B- = 3.67 C+ = 3.33 C = 3.0 C- = 2.67

NWTC is graded on a 4.0 scale

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
- Take out your flash drive/ jump drive

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