

Southern Utah University
Integrated Engineering
ENGR 1030 Introduction to Computer Assisted Drafting

COURSE SYLLABUS

General Information:

Course Title: Introduction to Computer Assisted Drafting
(Using SolidWorks)
Course Number: ENGR 1030
Section: 1
Credit Hours: 3 hours
Semester: Fall/Spring
Instructor: Scott Hansen
Office: TH #129A, Telephone: 586-7984
Email hansens@suu.edu (best way to reach me)
Grader: Brooke Warren. Her email is:
brookemwarren@gmail.com It is highly recommended that you use your SUU student email account. It is also your (the student's) responsibility to email Brooke and insure that she is indeed receiving your work. Do not send work to her not knowing if she is receiving it.

Office Hours: M,W,F 10:00 – 11:00 also available anytime by appointment

Meeting Time and Location:

Tuesday's and Thursday's 10:00 pm – 11:20 pm Room 120 in Technology Building

Academic Integrity:

Scholastic dishonesty will not be tolerated and will be prosecuted to the fullest extent. You are expected to have read and understood the current issue of the student handbook (published by Student Services) regarding student responsibilities and rights, and the intellectual property policy, for information about procedures and about what constitutes acceptable on-campus behavior.

Course Prerequisites:

None

Course Description:

A course stressing the in-depth core concepts of computer aided design. Emphasis is placed on developing lay-out and design skills along with problem solving. .

Course Structure:

The course will progress from simple basic drawings to complex sophisticated drawings.

Measurable Course Objectives:

To earn a grade of A students must complete at least 95% of the work, 95% correctly, by the last day of regular classes (Study Day). Course progress reports are to be filled out by the student each time a new drawing has been assigned. Students can track their final grade at anytime during the semester.

Course Background:

Solid Modeling has been an integral part of industry in recent years. It is a link between design and manufacturing and construction. Information is quickly communicated to construction and manufacturing companies in the form of drawings prepared to prescribed drafting standards. It is said that a picture is worth a thousand words. Actually, a drawing is worth much more. The speed of graphic comprehension can approach a rate of 50,000 times that of reading. Human beings have always sought the use of tools to make life easier and to enable them to become more productive.

Required Textbook:

Learning and Applying SolidWorks 2010-2011 Step by Step
ISBN: 978-0-8311-3399-3 Older versions of the book will not contain all the chapters that will be covered in class. Make sure you purchase the correct edition.

Student Outcomes:

At the conclusion of this course, students will be able to:

1. Create simple 3D solid models
2. Create detail drawings from existing solid models
3. Create complex 3D solid models
4. Create multiple sketch 3D solid models
5. Create a working system of multiple 3D solid models
6. Edit multiple 3D solid models while in a system environment
7. Simulate multiple 3D solid models while in a system environment
8. Develop introductory design skills
9. Develop advanced assembly design skills

What you will turn in: Due on Study Day to Brooke is an eportfolio of all the drawings that were assigned in class.

Out of class time will be required to complete all of the assigned drawings.

There is no due date for each of the drawings.

Drawings will not be accepted during finals week.

All drawings must be in order starting with the earliest.

All drawings must also include the drawing number. Drawings will be submitted via email with PowerPoint Presentation. If you need help using PowerPoint I will be glad to assist you. Portfolio's will be emailed to the instructor's grader. A confirmation email message will be sent back to you letting you know I received your E-Portfolio. If you do not receive a confirmation email from my grader then I did NOT receive your E-Portfolio. If there is any doubt that your E-Portfolio was received you are free to print off each drawing and turn in hard copies to the instructor/grader.

Students will develop a portfolio of all of their work and hand it in on the last day of class.

Feedback will be given in verbal form. If you would like feedback on any of your work simply ask the professor to give you a verbal grade. There is no due date for each of the drawings. **However, all drawings (your portfolio) must be turned in on Friday the last week of regular classes (prior to finals week). Portfolios turned after Study Day will result in a letter grade reduction for each day the portfolio is late.**

All Drawings are worth 10 points: Drawings that are assigned in and out of class are worth 10 points each.

Unannounced pop quizzes 20 points: There will be unannounced “in class” pop quizzes consisting of a drawing that is in alignment with student skill level at that point in the semester. Pop quizzes can also occur consecutively.

There is no makeup on any pop quiz.

Midterm 30 points: The Midterm exam will be an “in class” exam consisting of a drawing that is in alignment with student skill level at mid semester.

There is no makeup on the midterm.

Final 30 points: The Final exam will be an “in class” exam consisting of a drawing that is in alignment with student skill level at the end of the semester.

There is no makeup on the final.

Drawings are to be worked on DURING CLASS TIME. This means that while you are in class you must work on the assigned drawings to receive a passing grade. You don’t need to finish the drawings in class.

Students who show up to class and do not work on any of the assigned drawings in hopes of completing the drawing later will receive an absence. If you examine the syllabus you are required to have at least 75% attendance to pass the class REGARDLESS of how much work you submit. If you turn in the most beautiful portfolio and never attended class and none of the drawings were worked on in class, you will receive an F for the semester regardless of how much work you did.

Students who do not show up to class at all or very seldom and simply get the assignments from a classmate will also receive an absence. If you examine the syllabus you are required to have at least 75% attendance to pass the class REGARDLESS of how much work you submit. Again, if you turn in the most beautiful portfolio and never attended class and none of the drawings were worked on in class, you will receive an F for the semester regardless of how much work you did.

This is all done in an effort to guard against Plagiarism. If you are submitting someone else’s work you are in violation of class policy AND university policy which will result in receiving a grade of F along with jeopardizing your status as a student at SUU. Students feel that they are only in violation of policy if they get caught. This is not true. If you are submitting someone else’s work you are only hurting yourself.

Students will be required to work on the assigned drawings DURING CLASS TIME.

If you are unable to complete a simple drawing assignment in class you will not pass either the midterm or final exams. Both of these exams you will be required to not only work on but actually complete the assignment in the time allotted. The total number of points for both exams is 60 (30 each).

Attendance Credit:

Students receive 10 points of attendance credit for each class period they attend providing they are not late. Arriving to class late will result in NO attendance credit. Attendance credit will be added towards your final course grade.

Do not come and ask what your grade is before grades are posted. The grading process is long and tedious. This is one reason that professors do not care for grading papers. For this class your instructor will grade all papers. No graders are used for this class. First assignments have to be examined as a whole. Then assignments must be graded. Then those grades must be entered in Excel. Then grades must be calculated. And finally grades must submitted. Your grades will appear as soon as they are submitted.

Chapter 1 – Getting Started

Assigned Drawings: Chapter 1 drawing

Chapter 2 – Learning More Basics

Assigned Drawings: Chapter 2 drawing

Chapter 3 – Learning to Create a Detail Drawing

Assigned Drawings: Chapter 3 drawing

Chapter 4 –Advanced Detail Drawing Procedures

Assigned Drawings: Chapter 4 drawing

Chapter 5 – Learning to Edit Existing Solid Models

Assigned Drawings: Chapter 5 drawing

Chapter 6 – Advanced Design Procedures

Assigned Drawings: Chapter 6 Drawing

Chapter 7 – Introduction to Assembly View Procedures

Assigned Drawings: Chapter 7 Drawing

Chapter 8 – Introduction to Advanced Commands

Assigned Drawings: Chapter 8 Drawing

Chapter 9 – Introduction to SimulationXpress

Assigned Drawings: Chapter 9 Drawing

Chapter 10- Introduction to Mechanical Mates

Assigned Drawings: Chapter 10 Drawing

Chapter 11- Advanced Workplane Procedures

Assigned Drawings: Chapter 11 Drawing

Chapter 12- Introduction to Creating a Helix

Assigned Drawings: Chapter 12 Drawing

Chapter 13- Introduction to Importing .DWG files

Assigned Drawings: Chapter 13 Drawing

Chapter 14- Introduction to the Design Library

Assigned Drawings: Chapter 14 Drawing

Chapter 15- Introduction to the DMFXpress Analysis Wizard

Assigned Drawings: Chapter 15 Drawing

Additional Assigned Drawings: Additional drawings will given in class.

**The instructor reserves the right to substitute and add drawings as needed.*

What you will turn in: _____ Due on Friday Study Day is an eportfolio of all the drawings that you completed in class. Any portfolios handed in after Study Day will lose 1 letter grade off the final course grade for each day the portfolio is late.

Late Assignments and/or makeup work:

Make up work of extra credit work is always available. For extra credit work come see me. **Any and all work that is submitted late will be penalized. On the midterm and final exam, students will lose 1 point (out of 30) for every minute the exam is late. For the portfolio, students will lose a letter grade from the final course grade, for each day the portfolio is late.**

Assessment: Assessment will be performed under the following criteria:

100 - 94% = A

93 – 90%	= A-
89 – 87%	= B+
86 - 84%	= B
83 - 80%	= B-
79 – 77%	= C+
76 - 74%	= C
73 - 70%	= C-
69 – 67%	= D+
66 -64%	= D
63 -60%	= D-
59 – 57	= F+
56 – less	= F

To earn a grade of A students must complete at least 95% of the work and attend class 95% of the time.

To earn a passing grade students must attend at least 75% of class regardless of the amount of work that is submitted.

Attendance: Attendance is mandatory for passing this course. Your attendance will be calculated into your final grade using the criteria described above. Simply getting the assignments from a class mate is not permitted.

You will be given 10 points per day for each day you attend class. At the end of the semester your attendance credit will averaged (50%) with your performance credit. Attendance is 50% of your grade.

Attendance is only taken once per class period at the beginning. You will receive 10 points of attendance credit for being on time to class and staying the entire time. If you are late to class you will lose 1 point of attendance credit for each minute you are late. If you are 10 minutes or more late to class you will not receive any attendance credit for that day. This does not mean you have to leave class, is simply means that for that day, you will not receive any attendance credit.

Class participation: Students are required to bring text books and all other materials to each class meeting. Any student who attends class without a text book and other materials will receive an absence. Any student who does work from another class in class will be given an absence.

Midterm 30 points: The midterm exam will be given during class time. Date of the midterm exam will be announced at a later time.

Final 30 points: The final exam time will be announced at a later date. The final exam will ONLY be administered during that time. **Do not ask to take the final exam early.** There will be NO make up if a student misses the final exam.

Policies: University policies regarding conduct, attendance, and plagiarism will be **STRICTLY** enforced.

There will be none of the following:

- Vulgar jokes or comments said to other students of the same sex or of the opposite sex, or to the instructor.
- Chewing tobacco

Violation of any of these policies will result in an absence.

Mentoring Statement:

If by chance you start falling behind though no fault of your own, PLEASE do not drop the class at the first sign of turbulence, please come and visit me. The sooner you come see me, the sooner we can develop a intervention plan to get you back on track. Because drawing portfolios are not due until the end of the semester, it is not impossible for students to get back on track with a little extra effort. If for some reason you are feeling bad about life in general, come and see me. I can probably provide you with some insight that will help you feel better about everything.

"HEOA Compliance statement: The sharing of copyrighted material through peer-to-peer (P2P) file sharing, except as provided under U.S. copyright law, is prohibited by law. Detailed information can be found at <http://www.suu.edu/it/p2p-student-notice.html>."

It is against university policy to submit work **AFTER** grades have been issued. Course grades will **NOT** be changed after the fact unless there is an **instructor error**. Students will be awarded the grade they earned. Grades are issued on student performance.

ADA Statement: If you have a disability which may impair your ability to successfully complete this course, please let Student Support Services know during the first week of class. Students with medical, psychological, learning or other disabilities desiring academic adjustments, accommodations, or auxiliary aids will need to contact the Southern Utah University Coordinator of Services for with Disabilities (SSD), in Room 205C, of the Sharwan Smith Center or phone (435) 875-8022. SSD determines eligibility for and authorizes the provision of services.

Final Disclaimer Statement:

