

ENGR 1111 – ENGINEERING GRAPHICS

Spring 2019

Syllabus

Instructor: Bill Saari

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Office Hours: 12:00 - 12:50 on Mondays, Wednesdays, and Fridays; 11:00 - 11:50 on Tuesdays and Thursdays

Course Website: <http://www.ar.cc.mn.us/saari/engr1111>

Prerequisite

MATH 0250

Course Description

Topics include: pencil sketches, standards of engineering drawings, orthographic projection, auxiliary drawings by rotations, dimensioning, tolerances, assembly drawings, and computer-aided design using Creo.

Major Areas of Course Content

1. Pencil sketches of engineering drawings
2. Orthographic projection
3. Section views
4. Dimensioning and tolerancing
5. Assembly drawings
6. Engineering design
7. 3-D computer-aided design using Creo

Learner Outcomes

1. Understand the principles of creating engineering drawings
2. Use computer-aided design (CAD) and in 3-D solid modeling.
3. Understand and apply the engineering design process

Textbooks

Engineering Graphics Essentials, Fifth Edition by Plantenberg

Creo Parametric 3.0 Tutorial by Toogood and Zecher

Grading

Grades will be determined based on a weighted average of percentages.

Exams: 4 x 20% = 80%

Projects: 20%

A > 90%, B > 80%, C > 70%, D > 60%, F < 60%

Exams

Exams will be closed book, closed notes. There will be no make-up exams except under extreme cases determined at the discretion of the instructor, and only one make-up exam will be allowed. In order to be even considered for a make-up exam, you must contact me on or prior to the scheduled date for the exam.

Projects

Students will design a part assembly. The individual parts and part assembly of the design using Creo will be submitted, and the parts will be printed using a 3D printer. A second project using the analysis capabilities of Creo Simulate will also be assigned.

Academic Dishonesty

I expect the work you turn in to be your own efforts. Instances of academic dishonesty will be dealt with according to the regulations of Anoka-Ramsey Community College.

Class Conduct

You are expected to be courteous towards the instructor and your classmates. You are expected to be on time for lecture. You should not talk to your classmates while I am talking or while one of your classmates is asking a question. If you have a question about the course material, ask me and I will be more than happy to answer your question. The instructor reserves the right to take any necessary action for class disruptions in accordance with the Student Handbook.

Tentative Course Schedule

Week of	Monday	Wednesday	Friday
Jan 14	Intro	Ch 2	Ch 2
Jan 21	No Class	Ch 2	Ch 2
Jan 28	Ch 2	Ch 5	Ch 5
Feb 4	Ch 5	Creo Ch 1	Creo Ch 2
Feb 11	Creo Ch 2	Creo Ch 3	Exam 1
Feb 18	No Class	Creo Ch 3	No Class
Feb 25	Creo Ch 4	Creo Ch 6	Creo Ch 7
Mar 4	Exam 2 (Group A)	Exam 2 (Group B)	Exam 2 (Group C)
Mar 11	No Class	No Class	No Class
Mar 18	Creo Ch 11	Creo Ch 11	Creo Ch 11
Mar 25	Creo Ch 9	Creo Ch 8	Creo Ch 8
Apr 1	Exam 3 (Group C)	Exam 3 (Group B)	Exam 3 (Group A)
Apr 8	Ch 4	Ch 4	Ch 4
Apr 15	Ch 4	Ch 7	Design Project Due
Apr 22	Ch 7	Ch 8	Ch 8
Apr 29	Ch 9	Creo Simulate	Exam 4
May 6	Creo Simulate	Creo Simulate	Creo Simulate Project Due
Design Project Exhibition: Wednesday, May 15, 9:40 am – 11:40 pm			