



Syllabus, Spring 2022

Instructor: Carl D. Crane ccrane@ufl.edu (all course correspondence will be via Canvas messaging) 352-219-6433 Office Hours: Wednesday 9:40-10:30 via Zoom conference

Teaching Assistants: • Chris Mauldin • Kaitlyn Campbell

Course Description: Credits: 3. Sketching, descriptive geometry, computer graphics, computer aided drafting and design projects.

Course Pre-Requisites / Co-Requisites: None.

Course Objectives: Educate students on the main concepts of computer aided design to include: • solid modeling • assembly design • engineering drawing conventions • Geometric Dimensioning and Tolerancing (GDT) • basics of descriptive geometry • processes of additive and subtractive rapid prototyping

Materials and Supply Fees: ~\$111.82

Textbooks and Software: SolidWorks Software 2021-2022 (download and installation instructions provided in class)

Course Outline • Communication. Sketching. • Modeling (a) Part modeling. (b) Generation of drawings. (c) Assembly modeling. • Rapid Prototyping • Threads and Fasteners • Clearance Fits • Design Process • Geometric Dimensioning and Tolerancing • Motion Analysis • Stress Analysis

Course Schedule: [Spring 2022 schedule](#)

Course Format: • Students will be assigned videos to be watched before every class. A short online quiz will be held at the start of class. A graded class activity, based on the assigned video topic, will be held during every class. It will be very difficult to complete (or even start) the class activity if the video has not been watched.

Attendance Policy: Attendance is expected. Graded class activities will be held every day. Students are responsible for knowledge of all scheduling and policy announcements made in class. All homework will be turned in electronically via the class Canvas web site. Assignments that are submitted after the due date and time, but before the assignment closure date and time (usually, but not always, 2 days after the due date) will be deducted 30%. Only the files that are uploaded will be graded. Check your files to make sure they are correct and not corrupted. All work submitted in this course must be your own and produced exclusively for this course.

Grading:

Assignment	Percentage of Final Grade
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Homework 55%

GDT Quiz 15%

SolidWorks
Certification 15%
Exam

Class Activities 15%

100%

Percent	Grade
94– 100%	A
90 – <94%	A-
87 - <90%	B+
84 - <87%	B
80 - <84%	B-
77 - <80%	C+
74 - <77%	C
70 - <74%	C-
67 – <70%	D+

64 – <67%	D
60 – <64%	D-
0 – <60%	E

Honesty Policy: UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

Honesty Penalty: All work is to be done individually, with the exception of in-class activities. Any copied assignments will result in a zero for that assignment and a letter grade reduction for the course. For example, if your final grade was to be a B+, it would be reduced to a C+. Class activities are password protected and must be accomplished during class. It will be considered an act of academic dishonesty (on both parties) if a student shares the password and solution with a student who did not exhibit an effort to complete the activity.

Campus Resources:

- ❖ [U Matter, W Care](#)
- ❖ [Counseling and Wellness Center](#)