

Course Syllabus

MECH 3305-002, Computer Aided Design

Course Information

MECH3305-002 Computer Aided Design
Tuesday & Thursday: 11:30AM–12:45PM
Starts: Tuesday August 23, 2016

Fall 2016
Lecture Room: ML2-1.218
Ends: Tuesday December 6, 2016

Professor Contact Information

Dani Fadda, Ph.D., P.E.
Office Phone: 972-883-4626
Office Hours: Tuesday 8:30AM–10AM

Email: fadda@utdallas.edu
Office: ECSN 2.906

TA Contact Information

Name: Nishanth Bhat
Office Hours: Wednesday 3-4:30PM & Thursday 4:30-6PM

Office: ECSN 2.316
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Course Pre-requisites Co-requisites and/or Restrictions

Pre-requisite(s): MECH 1208 – Intro to Mechanical Engineering
ENGR 2300 – Linear Algebra for Engineers
Pre or Co-requisite: CS 1325 – Intro to Programming (or CE/CS/TE 1337)
Co-requisite: MECH 3105 – Computer Aided Design Laboratory

Description:

Course material includes an introduction to Computer-Aided Design (CAD) tools and their applications to the geometric design and analysis of mechanical components and assemblies. CAD software will be used to generate sketches, curves, surfaces, solids, assemblies, and engineering drawings suitable for different manufacturing processes. Innovative team-oriented projects are integrated into the course.

Course Learning Outcomes (CLOs)

- 1) Be able to create 3D geometric models, assemblies, and engineering drawings that are suitable for manufacturing.
 - 2) Be able to determine degrees of freedom of sketches and assemblies.
 - 3) Be able to generate fabrication packages to represent mechanical assemblies ready for traditional and emerging manufacturing processes.
 - 4) Be able to function effectively in teams to generate concepts and prototypes for the design of mechanical assemblies.
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Reference Textbooks and Materials

- 1) Engineering Drawing and Design by Jensen, Helsel, and Short, 7th Edition, ISBN-978-0-07-352151-0
 - 2) Creo Parametric 2.0, Tutorial, Roger Toogood, SDC Publications, ISBN-10: 1585038156
 - 3) Computer Aided Engineering Design, Anupam Saxena and Birendra Sahay ISBN-13: 978-1402025556. The eBook is available at UTD library website (UTD login ID and password required)
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Assignments and Projects

The assignments and project must be submitted before the due date and cutoff time through eLearning. Read the instructions carefully and upload the correct file. If not submitted by the due date **or** if resubmittal is required for any reason, 50% of the grade will be deducted. Submittal of homework or projects by email is strictly prohibited **and** the eLearning link will be closed shortly after the deadline. Missed assignments will receive a zero. If an assignment is missed due to illness, the student must provide a note from a doctor.

Email

Email must be sent from your UTD email account to UTD email address of the instructor or TA with the subject of the email as: MECH 3305 and shall not include any grading information or deliverable.

Lectures

Lecture notes will be posted in eLearning. However, some concepts will be discussed on white board or overhead projector. You are required to take notes in that case. The use of personal laptops for the class activities is allowed in the class. No use of cell phones or other devices that may disturb others is allowed in class. Talking or doing unrelated work during lectures can be disruptive to those around you and is not allowed.

Grading policy

Assignments and classwork	35%
Exams	30%
Project	35%

Make-up Exams

Make-up exams will only be given with instructor approval which must be granted before the exam date or under unusual circumstances. If an exam is missed due to illness, the student must bring a proof from doctor's office.

Academic Dishonesty

Academic dishonesty will not be tolerated and will result in a grade of F in this course

Comet Creed

“As a Comet, I pledge honesty, integrity, and service in all that I do.”

This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same.

Policies and Procedures for Students

The University of Texas at Dallas provides a number of policies and procedures designed to provide students with a safe and supportive learning environment. Brief summaries of the policies and procedures are provided for you at <http://coursebook.utdallas.edu/syllabus-policies/> and include information about technical support, field trip policies, off-campus activities, student conduct and discipline, academic integrity, copyright infringement, email use, class attendance, withdrawal from class, student grievance procedures, incomplete grades, access to disability services, and religious holy days.

QR Codes



eLearning



CREO



DraftSight



PTC



SolidWorks



SolidWorks

The descriptions are subject to change at the discretion of the instructor.