# MECH 1208 – Introduction to Mechanical Engineering

### Instructor Contact Information

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### **Teaching Assistant Contact Information**

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### Course Pre-requisites, Co-requisites and/or Other Restrictions

Pre-requisite:	ECS 1200
Co-requisite:	PHYS 2325/2125 and MATH 2419 or MATH 2414
Other Restrictions:	None

## **Course Description**

The purpose of this course is to give students a general understanding of the broad range of technical areas and applications specific to the mechanical engineering profession. Course activities include team oriented-competitions and lectures by mechanical engineering experts.

## **Student Learning Objectives/Outcomes**

The learning objectives/outcomes for this course are as follows:

- Introduction of mechanical engineering topics (mechanical design, forces in structures and machines, materials and stresses, motion and power transmission, fluids engineering, thermal and energy systems).
- Problem-solving and communication skills.
- Teamwork and group projects.

### **Required Texbooks and Materials**

An Introduction to Mechanical Engineering, 3<sup>rd</sup> Ed. by Jonathan Wickert and Kemper Lewis CL-Engineering Publishing ISBN-13: 978-1-111-57680-6

### **Course Topics**

The following is a tentative schedule of topics that will be covered in this course.

Week(s)	Topic(s)
1	Mechanical Engineering Profession
2-4	Mechanical Design
5-8	Forces in Structures and Machines
9	Spring Break!
10-11	Materials and Stresses
12-13	Motion and Power Transmission
14-16	Fluids Engineering and Thermal and Energy Systems

### **Grading Policy**

Final grades will be evaluated as follows:

Homeworks (~6)	15%
Exams (4)	60%
Group Design Project	20%
Class Attendance	5%

#### **Course and Instructor Policy**

#### Email

Email must be sent from your UTD email account to UTD email address of the instructor (or TA). Please allow 24-36 hours for a response during the week. An emailed homework will not be accepted.

#### Homework

Homework must be submitted to the instructor at the beginning of class on the day it is due or by the time indicated by the instructor. If the homework is not submitted by that time, **25%** of the total grade will be deducted and an additional **25%** will be deducted for each day it is late. Homework assignments must have your name, date and assignment number. No exceptions.

#### 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 produce a note from his or her doctor which states the student was unable to attend the exam and include the phone number for the doctor's office.

#### Project

A project will be assigned that ties together course topics. Groups will be assigned by the instructor and it is the students' responsibility to initialize communication and work with his/her assigned group.

#### Extra Credit

Extra credit may be offered at the discretion of the instructor.

### **Rules for Exams**

- 1. Whenever possible, an empty seat should be left between each student during an exam.
- 2. Only a pencil, eraser, straightedge, a formula sheet and engineering paper are allowed. Other materials such as books, notebooks and backpacks must be placed at the front of the room or under your chair. You may not open your bag inside the room once the exam has begun.
- 3. Exam materials will be passed out at the beginning of class or as soon as all extraneous materials are placed in the front of the room or under your chair.
- 4. With the exception of your calculator, no electronic devices are allowed. A ringing cell phone will result in a zero for the exam.
- 5. If late to an exam, remove any necessary materials (pencil, etc.) from your bag before entering the room. Quietly enter the room and wait for further instructions.

### Academic Dishonesty

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

### **University Policies**

Please refer to the following website to obtain university information regarding:

- Student Conduct and Discipline
- Academic Integrity
- Copyright Information
- Email Use
- Class Attendance
- Withdrawal from Class
- Student Grievance Procedures
- Incomplete Grade Policy
- Disability Services
- Religious Holy Days
- Avoiding Plagiarism

http://go.utdallas.edu/syllabus-policies

These descriptions and timelines are subject to change at the discretion of the instructor.