

Course Syllabus for

MECH 1208 – Introduction to Mechanical Engineering

Summer 2016, Class meets on MW from 10:00am-11:15am

Note: One week of class time during summer roughly equals 1.5 weeks during a long semester

Professor Contact Information

Dr. Oziel Rios

Office: ECSN 2.506
Office Hours: Monday and Wednesday 11:15am-12:30pm
Phone: (972) 883-4690
Email: oziel.rios@utdallas.edu

Teaching Assistant Contact Information

Name: Devashish Lingam
Office: ECSN 2.316, 2.318 (Freshman Studio)
Office Hours: TBD
Email: devashish.lingam@utdallas.edu

Note: Devashish is available on Friday (7:00am-5:00pm) only by appointment. Send him an email in advance if you wish to meet on Friday. On certain weeks, Devashish will hold review sessions and/or tutorials on Fridays. The time for these Friday sessions will depend on the availability of rooms.

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

Pre-requisite: MECH 1100 or equivalent
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.

Course Objectives and Topics

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 Textbook and Supplies

Engineering: The University of Texas at Dallas, MECH 1208
 Pearson Custom Library
 ISBN-13: 978-1-323-34463-7

Notes, supporting material and other resources will be posted on eLearning. Check this site frequently throughout the semester.

Course Structure and Schedule

In MECH 1208, you will attend two class sessions each week which will take place in **ECSS 2.311**. Some class sessions will be held in the freshman studio located in **ECSN 2.316** and **2.318** (the space adjacent to the atrium in the north side of ECS building) as indicated in the "Location" column of the schedule below where you will work on activities related to the course topics.

The following is a **tentative** schedule of class topics. These dates are subject to change. It is your responsibility to keep up with any changes.

Week	Day	**	Topic(s)	Location
1	5-23		Overview of Course, The MECH Profession [Ch. 1], Mechanical Design [Ch. 5]	
	5-25	A1	Solid Modeling [Ch. 6-10]	
	5-27		(Optional) SolidWorks Introduction	Studio
2	5-30		NO CLASS - Labor Day	
	6-1	A2	Computer-Aided Design	Studio
3	6-6	A3	Computer-Aided Design	Studio
	6-8	A4	Computer-Aided Design	Studio
4	6-13	A5	Computer-Aided Design	Studio
	6-15	A6	Computer-Aided Design	Studio
5	6-20	A7	Unit Systems [Ch. 2]; Static Equilibrium [Ch. 3]	
	6-22	A8	Matlab [Ch. 11-16]	
	6-24		(Optional) Matlab Tutorial	TBD
6	6-27	A9	Force Calculations	Studio
	6-29	A10	Force Calculations	Studio
	7-1		(Optional) Review for First Exam	TBD
7	7-4		NO CLASS - Independence Day	
	7-6		NO CLASS - First Exam	Testing Center
8	7-11	A11	Force Calculations	Studio
	7-13	A12	Force Calculations (Testing)	Studio
9	7-18	A13	Thermal Energy Systems [Ch. 4]	
	7-20	A14	Thermal Energy Systems [Ch. 4]	
10	7-25	A15	Thermal Calculations	Studio
	7-27	A16	Thermal Calculations	Studio
11	8-1	A17	Thermal Calculations	Studio
	8-3	A18	Thermal Calculations	Studio
	8-5		(Optional) Review for Second Exam	TBD
12	8-8		NO CLASS - Second Exam	Testing Center

** Column 3 indicates the label used for attendance in eLearning gradebook. A value of 0 indicates a missed class. See "Grading Policy" section if you need to appeal any grade.

Important Dates

Memorial Day (no classes):	May 30
First day of classes:	May 23
Census day:	June 2
Last day to withdraw without "W":	June 2
Independence Day (no classes):	July 4
Last day to withdraw with "W":	July 11
Last day of classes:	August 8
Final Exams:	August 9-10

Grading Policy

[10%] Class Attendance: You are required to attend all class sessions. Your attendance grade will be determined as follows:

- 3 or fewer absences receive full 10% attendance credit
- 4 or more absences receive 0% attendance credit
- 6 or more absences will result in a grade of **F** in MECH1208

Being 10-minutes late or leaving before class has ended without finishing your work (and demonstrating to instructor or TA) will result in an absence for that class session. Proper documentation must be provided for excused absences (such as a doctor's note).

[40%] Exams: There will be two exams each worth 20%. Make-up exams will only be allowed for the cases of illness, attendance of a university-sponsored event (such as an athletic activity) or under unusual circumstances. For each case, you are required to provide proper documentation (such as doctor's note or note from athletic advisor).

[50%] Homework Assignments and In-Class Activities: Unless otherwise stated, homework assignments and deliverables for in-class activities will be submitted in eLearning. *No late assignments will be accepted under any circumstances.*

You have five business days to appeal any grade or absence (contact the instructor or TA during office hours). The days will be counted starting from the day the assignment or exam is returned or the day of the absence. You must send an email to the instructor or TA explaining the situation and you must provide all necessary documentation at that time.

Your final grade will be rounded to the nearest whole number and the final letter grade will be assigned based on the following ranges:

	Plus (+)		Minus (-)
A	100 - 97	96 - 93	92 - 90
B	89 - 87	86 - 83	82 - 80
C	79 - 77	76 - 73	72 - 70
D	69 - 67	66 - 63	62 - 60
F		59 and below	

Course & Instructor Policies

Email must be sent from your UTD email account to the UTD email address of the instructor or TAs **for your section**. Emails related to homework submissions should be addressed to both the instructor and TA. Please allow 24-36 hours for a response during the week. Please format your emails professionally before sending: (i) address the recipient appropriately (e.g., “Prof. Rios” or “Dear Dr. Rios”), (ii) use correct grammar, capitalization, and sentence structure, and (iii) add a closing (e.g., “Best regards”, or “Best wishes”).

Throughout the semester, the instructor will have intermittent, unavoidable professional travel commitments. On these days, the instructor will provide advance notice and class will be canceled or taught by a TA.

The use of cell phones are **not** allowed during lectures or exams. The use of laptops is encouraged during studio sessions (see "Course Structure and Schedule").

The rules for exams are as follows:

- Only a pencil, eraser and basic calculator are allowed. Other materials such as books, notes, other electronic devices and backpacks must be placed under your chair or as indicated by the testing center. You may not open your bag inside the room once the exam has begun.
- If late to an exam, remove permitted items from your bag before entering the room. Quietly enter the room and wait for further instructions.

Academic dishonesty will not be tolerated. All suspected cases of academic dishonesty will be sent to the Office of Judicial Affairs (see <http://www.utdallas.edu/deanofstudents/managing/>). If it is determined that academic dishonesty occurred you will receive a grade of **F** in this course.

For a full list of university policies, please visit <http://go.utdallas.edu/syllabus-policies>

THE INFORMATION IN THIS DOCUMENT IS SUBJECT TO CHANGE AT THE DISCRETION
OF THE INSTRUCTOR.
