

Course Syllabus

MECH 3320-5U1, Heat Transfer

Course Information

MECH 3320, Heat Transfer
Monday & Wednesday: 5:30PM–7:45PM
Starts: May 30, 2017

Summer 2017
Lecture Room: JO 4.614
Ends: August 10, 2017

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: Niloofar Mohammadi
Office Hours: Mondays 8AM-10AM

Office: ECSN 2.124
Email: nxm134130@utdallas.edu

Course Pre-requisites

Pre-requisite(s): MECH 3310, Thermodynamics
 MECH 3315, Intro to Fluid Mechanics

Description:

This course focuses on steady state and time-dependent conduction in one- and two-dimensions; forced convection, internal and external flows; heat exchangers; introduction to radiation; elements of thermal system design.

Course Learning Outcomes (CLOs)

CLO1: Solve problems of one-dimensional steady-state heat conduction

CLO2: Describe the concepts of internal and external forced convection for both laminar and turbulent flows

CLO3: Analyze various heat exchangers

CLO4: Apply the basic theory for radiation heat transfer

Textbooks and Materials

Required Book: Fundamentals of Heat and Mass Transfer, by Bergman, Lavine, Incropera, and Dewitt, 7th ed. Wiley, 2011; ISBN 13 978-0470-50197-9

Other Required Materials: Mechanical pencil, notebook for writing notes in class, scientific calculator, computer, and access to a scanner

Schedule

A schedule will be uploaded to eLearning and will be updated throughout the semester.

Exams

Two exams will be given. Make-up exams will only be given with instructor approval which must be granted before the exam date or under unusual circumstances (e.g., doctor's letter)

Assignments

The assignment are only accepted if submitted through eLearning before the due date, otherwise a zero will be given. 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 3320. Email shall not be used for submitting assignments.

Lectures

Concepts will be discussed using PowerPoint and also on white board or overhead projector. Students are required to take notes in the class.

Grading policy

Final letter grades will be assigned according to the eLearning standards which are subject to change at the discretion of the instructor. The grades will be based on the following:

| | |
|--------------|-----|
| Assignments: | 35% |
| Exams: | 45% |
| Project: | 20% |

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/>.



The descriptions shown in this syllabus are subject to change at the discretion of the professor.