

ANKARA UNIVERSITY
Department of Energy Engineering
ENE 305/335 - Heat and Mass Transfer

COURSE SYLLABUS

Instructor
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The objective is to teach you the basic principles of heat and mass transfer with emphasis on their analysis and applications to a wide variety of practical engineering problems. Upon successful completion of this course, you should be able to:

- Understand the basic laws of heat transfer
- Analyze one-dimensional, steady-state *conduction* with/without internal generation of thermal energy
- Analyze heat transfer from extended surfaces
- Understand transient/unsteady heat transfer problems
- Differentiate between internal and external *convective* heat transfer problems
- Analyze and perform the thermal design of heat exchangers
- Understand the specific nature of the *radiation*, and the manner in which it interacts with matter
- Analyze mass transfer via diffusion
- Understand the analogy between heat and mass transfer

Lectures Hours

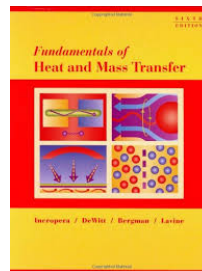
Wednesdays – 13:30

Fridays – 10:30

You are welcomed to email me at any time and ask your questions right after the online lectures.

Textbook

Incropera's Principles of Heat and Mass Transfer



Supplementary reference: Heat Transfer: Dr. John Biddle's Lecture Series from youtube.com

Exams

One midterm exam will be given on the following date:
December 18, 2020.

Grading

A weighted average grade will be calculated as follows:

Midterm exam: 30%

Final exam: 40%

Project:40%