UC Berkeley Department of Mechanical Engineering ME 109 Heat Transfer (CCN 14559)

Summer 2018

Monday June 4th to Wednesday August 8th, 2018

Instructor: Dr. David Rich

(davidrich@berkeley.edu, rich@reaxengineering.com)

Office: 60 A Hesse Hall

Office Hours: MW – after class

GSIs: Andrea Pickel, <u>apickel@berkeley.edu</u>

Text: Fundamentals of Heat and Mass Transfer, 7th Edition (2011)

Bergman, Lavine, Incropera, & DeWitt ("BLID-7th"), ISBN 9780470501979, Wiley.

Other Editions are acceptable (e.g., IDBL-6th).

Lecture: MW 9:30 AM-12:00 PM, Moffitt Library 150D

Final Exam: Wednesday 8/8/18, 9:30-12:00 am

The final will be comprehensive and similar in format to the quiz.

Website: https://bcourses.berkeley.edu/

Grading: Homework 20%

Midterm (1) 40% Final 40%

Homework: Graded for completion plus one or more for quality.

Discussions: S 101, Friday 11:00 am – 12:30 pm, 3107 Etcheverry (14560)

Cheating: Don't do it. If you are unclear what constitutes cheating, ask your GSI. As a member of the campus community, you are expected to demonstrate integrity in all of your academic endeavors and will be evaluated on your own merits.

Students with a Disability: If you need special accommodations in this class, please inform the course administrators immediately.

Week	Day	Date (2018)	Chapter
1	Monday	June 4th	Chapter 1, Introduction
	Wednesday	June 6th	Chapter 2, Introduction to Conduction
2	Monday	June 11th	Chater 3, 1D Steady State Conduction
	Wednesday	June 13th	Chater 3, 1D Steady State Conduction
3	Monday	June 18th	Chapter 4, 2D Steady State Conduction
	Wednesday	June 20th	Chapter 4, 2D Steady State Conduction
4	Monday	June 25th	Chapter 5, Transient Conduction
	Wednesday	June 27th	Chapter 5, Transient Conduction
5	Monday	July 2nd	Midterm
	Wednesday	July 4th	Academic Holiday
6	Monday	July 9th	Chapter 6, Introduction to Convection
	Wednesday	July 11th	Chapter 7, External Flow
7	Monday	July 16th	Chapter 8, Internal Flow
	Wednesday	July 18th	Chapter 9, Free Convection
8	Monday	July 23rd	Chapter 12, Radiation Processes and Properties
	Wednesday	July 25th	Chapter 12, Radiation Processes and Properties
9	Monday	July 30th	Chapter 13, Radiation Exchange Between Surfaces
	Wednesday	August 1st	Chapter 13, Radiation Exchange Between Surfaces
10	Monday	August 6th	Review
	Wednesday	August 8th	Final