UC Berkeley Department of Mechanical Engineering
ME 109 Heat Transfer (CCN 55509)

Spring 2016
Wednesday January 20th to Friday May 6th, 2016

Instructor: Dr. David Rich
(davidrich@berkeley.edu, rich@reaxengineering.com)
Office: 60 A Hesse Hall
Office Hours: MWF 4-5

GSIs: Chenkun Zheng, zhengck_carlo@berkeley.edu

Text: *Fundamentals of Heat and Mass Transfer*, 7th Edition (2011)
Bergman, Lavine, Incropera, & DeWitt ("BLID-7th "), ISBN 9780470501979, Wiley.

Other Editions may be acceptable (e.g., IDBL-6th), but it is your responsibility to determine the correct homework problems and readings if they do not match up.

Lecture: MWF 3:00-4:00 PM, 105 North Gate

Final Exam: Wednesday 5/11/16 , 7-10pm (to be verified)
The final will be comprehensive and similar in format to the quizzes.

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

Grading:

Homework	15%
Quizzes (2)	50%
Final	35%

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

Quizzes: Two mid-terms and one final, closed book and note.

Discussions: S 101, Wednesday 4-5 pm, 3106 Etcheverry (55512)
S 102, Thursday 2-3 pm, 180 Tan (55515)

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 (2016)	Action
1	Wednesday	20-Jan	Chapter 1, Introduction
	Friday	22-Jan	Chapter 1, Introduction
2	Monday	25-Jan	Chapter 2, Introduction to Conduction
	Wednesday	27-Jan	Chater 2, Introduction to Conduction
	Friday	29-Jan	Chater 3, 1D Steady State Conduction
3	Monday	1-Feb	Chapter 3, 1D Steady State Conduction
	Wednesday	3-Feb	Chapter 4, 2D Steady State Conduction
	Friday	5-Feb	Chapter 4, 2D Steady State Conduction
4	Monday	8-Feb	Chapter 5, Transient Conduction
	Wednesday	10-Feb	Chapter 5, Transient Conduction
	Friday	12-Feb	Chapter 5, Transient Conduction
5	Monday	15-Feb	Academic and Administrative Holiday
	Wednesday	17-Feb	Review Conduction
	Friday	19-Feb	Midterm 1
6	Monday	22-Feb	Chapter 6, Introduction to Convection
	Wednesday	24-Feb	Chapter 7, External Flow
	Friday	26-Feb	Chapter 7, External Flow
7	Monday	29-Feb	Chapter 8 Internal Flow
	Wednesday	2-Mar	Chapter 8 Internal Flow
	Friday	4-Mar	Chapter 9, Free Convection
8	Monday	7-Mar	Chapter 9, Free Convection
	Wednesday	9-Mar	Chapter 10, Boiling and Condensation
	Friday	11-Mar	Chapter 10, Boiling and Condensation
9	Monday	14-Mar	Chapter 11, Heat Exchangers
	Wednesday	16-Mar	Review Convection
	Friday	18-Mar	Midterm 2 (Tentative, Review Convection w Midterm 3/28)
10	Monday	21-Mar	Spring Recess
	Wednesday	23-Mar	Spring Recess
	Friday	25-Mar	Spring Recess
11	Monday	28-Mar	Chapter 12, Radiation Processes and Properties (Midterm 2)
	Wednesday	30-Mar	Chapter 12, Radiation Processes and Properties
	Friday	1-Apr	Chapter 12, Radiation Processes and Properties
12	Monday	4-Apr	Chapter 12, Radiation Processes and Properties
	Wednesday	6-Apr	Chapter 12, Radiation Processes and Properties
	Friday	8-Apr	Chapter 12, Radiation Processes and Properties
13	Monday	11-Apr	Chapter 13, Radiation Exchange Between Surfaces
	Wednesday	13-Apr	Chapter 13, Radiation Exchange Between Surfaces
	Friday	15-Apr	Chapter 13, Radiation Exchange Between Surfaces
14	Monday	18-Apr	Chapter 13, Radiation Exchange Between Surfaces
	Wednesday	20-Apr	Chapter 13, Radiation Exchange Between Surfaces
	Friday	22-Apr	Chapter 13, Radiation Exchange Between Surfaces
15	Monday	25-Apr	Review
	Wednesday	27-Apr	Review
	Friday	29-Apr	Formal Classes End
16	Monday	2-May	Reading/Review/Recitation Week
	Wednesday	4-May	Reading/Review/Recitation Week
	Friday	6-May	Reading/Review/Recitation Week
17	Monday	9-May	Start of Final Exam Week
	Wednesday	11-May	Final 7-10 PM