

ME 40 Thermodynamics (CCN 55356)

Fall 2015

Wednesday August 26th to Tuesday December 15th, 2015

Instructor: Dr. David Rich
(daverich@berkeley.edu, rich@reaxengineering.com)
Office: 60 A Hesse Hall
Office Hours: TBD

GSI: Xian Shi (xshi@berkeley.edu), Yulin Chen (yulinchina@berkeley.edu), Wing Tak Fung (wingtak@berkeley.edu)

Text: Cengel & Boles, *Thermodynamics: An Engineering Approach*

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

Discussions: Tu 5-6, 1165 Etcheverry, (55359)
Th 5-6, 3113 Etcheverry, (55362)
Tu 4-5, 141 Giannini, (55365)

Final Exam: Thursday December 18th, 2014 (3 hours)

Website: bSpace

Grading:	Homework	15%
	Quizzes (2)	60%
	Final	35%

Homework: Graded for completion plus one or more for quality. Assigned after chapter introduction and due in 1 week from assigned date.

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

Final: The final will be comprehensive and similar in format to the quizzes.

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 (2015)	Action
1	Wednesday	26-Aug	Chpt. 1 Introduction and Basic Concepts
	Friday	28-Aug	Chpt. 1 Introduction and Basic Concepts
2	Monday	31-Aug	Chpt. 2 Energy, Energy Transfer and Analysis
	Wednesday	2-Sep	Chpt. 2 Energy, Energy Transfer and Analysis
	Friday	4-Sep	Chpt. 3 Properties of Pure Substances
3	Monday	7-Sep	Academic Holiday
	Wednesday	9-Sep	Chpt. 3 Properties of Pure Substances
	Friday	11-Sep	Chpt. 3 Properties of Pure Substances
4	Monday	14-Sep	Chpt. 4 Energy Analysis of Closed Systems
	Wednesday	16-Sep	Chpt. 4 Energy Analysis of Closed Systems
	Friday	18-Sep	Chpt. 4 Energy Analysis of Closed Systems
5	Monday	21-Sep	Chpt. 5 Mass and Energy Analysis of Control Volumes
	Wednesday	23-Sep	Chpt. 5 Mass and Energy Analysis of Control Volumes
	Friday	25-Sep	Chpt. 5 Mass and Energy Analysis of Control Volumes
6	Monday	28-Sep	Midterm 1
	Wednesday	30-Sep	Chpt. 6 Second Law of Thermodynamics
	Friday	2-Oct	Chpt. 6 Second Law of Thermodynamics
7	Monday	5-Oct	Chpt. 7 Entropy 1
	Wednesday	7-Oct	Chpt. 7 Entropy 1
	Friday	9-Oct	Chpt. 7 Entropy 1
8	Monday	12-Oct	Chpt. 9 Gas Power Cycles
	Wednesday	14-Oct	Chpt. 9 Gas Power Cycles
	Friday	16-Oct	Chpt. 9 Gas Power Cycles
9	Monday	19-Oct	Chpt. 10 Vapor and Combined Power Cycles
	Wednesday	21-Oct	Chpt. 10 Vapor and Combined Power Cycles
	Friday	23-Oct	Chpt. 10 Vapor and Combined Power Cycles
10	Monday	26-Oct	Midterm 2
	Wednesday	28-Oct	Chpt. 11 Refrigeration Cycles
	Friday	30-Oct	Chpt. 11 Refrigeration Cycles
11	Monday	2-Nov	Chpt. 12 Thermodynamic Property Relations
	Wednesday	4-Nov	Chpt. 12 Thermodynamic Property Relations
	Friday	6-Nov	Chpt. 12 Thermodynamic Property Relations
12	Monday	9-Nov	Chpt. 13 Gas Mixtures
	Wednesday	11-Nov	Academic Holiday
	Friday	13-Nov	Chpt. 14 Gas Mixtures and HVAC
13	Monday	16-Nov	Chpt. 14 Gas Mixtures and HVAC
	Wednesday	18-Nov	Chpt. 14 Gas Mixtures and HVAC
	Friday	20-Nov	Chpt. 15 Chemical Reactions
14	Monday	23-Nov	Chpt. 15 Chemical Reactions
	Wednesday	25-Nov	Non-Instructional Day
	Friday	27-Nov	Academic Holiday (and Thursday 26-Nov)
15	Monday	30-Nov	Review
	Wednesday	2-Dec	Review
	Friday	4-Dec	Formal Classes End
16	Monday	7-Dec	Reading/Review/Recitation Week
	Wednesday	9-Dec	Reading/Review/Recitation Week
	Friday	11-Dec	Reading/Review/Recitation Week
17	Monday	14-Dec	Start of Final Exam Week
	Tuesday	15-Dec	Final 7-10 PM