

ME 40 Thermodynamics (CCN 55256)

Fall 2014

Friday August 29th to Friday December 12th, 2014

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

GSI: Miguel Sierra Aznar (m.sierra.aznar@berkeley.edu)
Je Ir Ryu (jryu@berkeley.edu)

Text Book: Cengel & Boles, *Thermodynamics: An Engineering Approach*, 7th Edition

Lecture: MWF 2:00-3:00 PM, 277 Cory

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

Website: bCourse

Grading:	Quizzes (8)	60%
	Final	40%

Homework: Suggested review problems will be assigned but are not graded. Solutions will be posted to bSpace.

Quizzes: Bi-monthly quizzes (Mondays at the start of class) will be closed and/or open book/notes. No computers/phones to be used during exams. You will be able to drop ONE of the quizzes at the end of the semester.

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

Discussions: S 101, Monday 4-5 pm, 3113 Etcheverry (55259)
S 102, Tuesday 10-11 pm, 3107 Etcheverry (55262)
S 103, Tuesday, 1-2 pm, 289 Cory (55265)
S 104, TBA (55267)

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.

SCHEDULE

Week	Day	Date (2014)	Action
1	Friday	August 29th	Chpt. 1 Introduction and Basic Concepts
2	Monday	September 1st	Academic Holiday
	Wednesday	September 3rd	Chpt. 1 Introduction and Basic Concepts
	Friday	September 5th	Chpt. 2 Energy, Energy Transfer and Analysis
3	Monday	September 8th	Chpt. 2 Energy, Energy Transfer and Analysis
	Wednesday	September 10th	Chpt. 3 Properties of Pure Substances
	Friday	September 12th	Chpt. 3 Properties of Pure Substances
4	Monday	September 15th	Quiz
	Wednesday	September 17th	Chpt. 4 Energy Analysis of Closed Systems
	Friday	September 19th	Chpt. 4 Energy Analysis of Closed Systems
5	Monday	September 22nd	Chpt. 5 Mass and Energy Analysis of Control Volumes
	Wednesday	September 24th	Chpt. 5 Mass and Energy Analysis of Control Volumes
	Friday	September 26th	Chpt. 5 Mass and Energy Analysis of Control Volumes
6	Monday	September 29th	Quiz
	Wednesday	October 1st	Chpt. 6 Second Law of Thermodynamics
	Friday	October 3rd	Chpt. 6 Second Law of Thermodynamics
7	Monday	October 6th	Chpt. 6 Second Law of Thermodynamics
	Wednesday	October 8th	Chpt. 7 Entropy 1
	Friday	October 10th	Chpt. 7 Entropy 1
8	Monday	October 13th	Quiz
	Wednesday	October 15th	Chpt. 8 Entropy 2/Exergy
	Friday	October 17th	Chpt. 8 Entropy 2/Exergy
9	Monday	October 20th	Chpt. 9 Gas Power Cycles
	Wednesday	October 22nd	Chpt. 9 Gas Power Cycles
	Friday	October 24th	Chpt. 9 Gas Power Cycles
10	Monday	October 27th	Quiz
	Wednesday	October 29th	Chpt. 10 Vapor and Combined Power Cycles
	Friday	October 31st	Chpt. 10 Vapor and Combined Power Cycles
11	Monday	November 3rd	Chpt. 10 Vapor and Combined Power Cycles
	Wednesday	November 5th	Chpt. 11 Refrigeration Cycles
	Friday	November 7th	Chpt. 11 Refrigeration Cycles
12	Monday	November 10th	Quiz
	Wednesday	November 12th	Chpt. 12 Thermodynamic Property Relations
	Friday	November 14th	Chpt. 12 Thermodynamic Property Relations
13	Monday	November 17th	Chpt. 12 Thermodynamic Property Relations
	Wednesday	November 19th	Chpt. 13 Gas Mixtures
	Friday	November 21st	Chpt. 13 Gas Mixtures
14	Monday	November 24th	Quiz
	Wednesday	November 26th	Chpt. 14 Gas Mixtures and HVAC
	Friday	November 28th	Academic Holiday
15	Monday	December 1st	Chpt. 14 Gas Mixtures and HVAC
	Wednesday	December 3rd	Chpt. 15 Chemical Reactions
	Friday	December 5th	Chpt. 15 Chemical Reactions
16	Monday	December 8th	Quiz
	Wednesday	December 10th	Review
	Friday	December 12th	Review, Last Day of Instruction
17	Thursday	December 18th	Final

Add/Drop: Visit <http://coe.berkeley.edu/students/current-undergraduates> for pertinent deadlines.