

ME 201

Thermodynamics

Section 1 MWF 8:00-8:50 2400 Engineering Building

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Hours: Mon. 1:30-2:30, Tues. 1:30-2:30, Wed. 9-10, Thurs. 10:30-11:30

Web Page: http://www.egr.msu.edu/~somerton/ME201_sec3/

Text: **Thermodynamics: An Engineering Approach** by Çengel and Boles

COURSE OUTLINE

Week of

1/9	Introduction, Basic Definitions, Conservation of Mass, Jet Aircraft Engine
1/16	Properties and Units, Household Refrigerator
1/23	Relations for Properties of Pure Substances
1/30	Relations for Properties of Pure Substances, Exam #1
2/6	Energy, Work, and Heat, Conservation of Energy (First Law of Thermodynamics)
2/13	Applications of the First Law
2/20	Applications of the First Law
2/27	Rules of Reality (Second Law of Thermodynamics), Exam #2
3/6	Spring Break
3/13	Heat Engines, Carnot Cycle, Entropy,
3/20	Application of the 2nd Law
3/27	Application of the 2nd Law, Exam #3
4/3	Availability and 2nd Law Effectiveness
4/10	Power Cycles
4/17	Power and Refrigeration Cycles, Exam #4
4/24	Air/Water Vapor Systems, Psychometrics

Final Exam: Friday, May 5, 7:45 - 9:45 a.m.

Scheduling of Exams #1-#4 is subject to change.

GRADING

Your grade will be based on two formulas and you will receive the higher of the two. I grade on the basis of a distribution. That is, I graph the class' numerical scores and draw the grade divisions based on how students group themselves. I use a straight scale to **guide** me in setting these grade divisions. That is

90 or higher	4.0
85-89	3.5
80-84	3.0
75-79	2.5
70-74	2.0
65-69	1.5
60-64	1.0
less than 60	0.0

Formula #1

Components: Best four scores among the four hour exams (HE) and the homework (HW) total and the final exam (FE).

Weighting: 40% FE + 15% each HE or HW

Formula #2

Components: Four hour exams (HE), the homework (HW) total, and the final exam (FE).

Weighting: 50% FE + 10% each HE and HW

Finally, I reserve the right to base your final grade solely on your final exam, if it benefits you.

HOMEWORK: Homework will be assigned every lecture and is due two lectures following. That is,

Assigned	Due
Monday	Friday
Wednesday	Monday
Friday	Wednesday

Late HW will be accepted provided that solutions have not been posted on the web page or the grader has begun grading the assignment.