ES 340 – Thermodynamics
Summer Session I – 2005

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Office hours: Mon.-Fri. 3:00pm-4:00pm

Course Page: http://www.clarkson.edu/fluidflow/kam/courses/2005/es340/

Textbook: Moran, J.M., Shapiro, H.N., *Fundamentals of Engineering Thermodynamics*, 5th ed., John Wiley and Sons, Inc., 2004.

Course Description: The fundamental concepts of thermodynamics and their application to pure substances. Topics include: properties of pure substances; work, heat, energy and the First Law of Thermodynamics; technique of First Law analysis; disorder, entropy and the Second Law of Thermodynamics; technique of Second Law analysis.

Prerequisites: MA 231 and PH 132

Grades: Course grades will be based on weekly quizzes and the final exam.
There will be no make up quizzes. Homework problems will be assigned and are recommended for students to work through but, will not collected or graded. It is the responsibility of the students to review these problems as necessary. One class period per week will be primarily used for discussion of homework problems.

Important Dates:

May 24:	Quiz 1	15%
May 31:	Quiz 2	20%
June 7:	Quiz 3	20%
June 14:	Quiz 4	15%
June 18:	Final Exam	30%

Note: No class on May 30th (Memorial Day).

Textbook Sections & Homework Problems:

Week-1 (May 16 – May 20): 1.1–1.6, 2.1–2.6
Problems: 1.29, 1.32, 1.49, 2.17, 2.25, 2.31, 2.57, 2.70, 2.75

Week-2 (May 23 – May 27): 3.1–3.8, 4.1
Problems: 3.3, 3.10, 3.28, 3.39, 3.61, 3.72, 3.84, 3.96, 3.109, 4.5, 4.6

Week-3 (May 31 – June 3): 4.2–4.4, 5.1–5.4
Problems: 4.18, 4.35, 4.42, 4.68, 4.78, 4.100, 5.15, 5.26, 5.29, 5.41

Week-4 (June 6 – June 10): 5.4–5.6, 6.1–6.
Problems: 5.47, 5.55, 5.64, 6.2, 6.9, 6.23, 6.31, 6.50, 6.67

Week-5 (June 13 – June 16): 6.5-6.9, 9.1-9.3
Problems: 6.94, 6.104, 6.133, 6.140, 6.157, 9.3, 9.11, 9.14, 9.17, 9.23, 9.29