Thermodynamics I (ME 398), Fall 2013

Department of Mechanical Engineering, Wichita State University

Instructor:	Dr. Gisuk Hwang
Office location/hours:	EB 101C, T/R 10:30am 12pm or by appointment
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Class schedule	4:10 5:25 pm, Room 127 Jabara Hall
Prerequisites:	MATH 243 (Calc II), PHYS 313 (Phys I), or by instructor permission
Grader:	Anusha Chakraborthy (axchakraborthy@wichita.edu)

Textbook: *Fundamentals of Engineering Thermodynamics*, 7th Ed., Wiley, by Moran, Shapiro, Boettner, and Bailey

References: *Fundamentals of Thermodynamics*, Wiley, 8th Ed., 2012, and *Thermodynamics* 6th Ed., Wark, McGraw-Hill, 2001

Course Description: the laws of thermodynamics including properties of substances and phase equilibrium, the first and second laws of thermodynamics, entropy, power cycles, refrigeration cycles, and chemical and phase equilibrium.

Objectives:

To gain an understanding of heat, work, and the First and Second Laws of Thermodynamics

To apply the above concepts to simple processes, including phase changes, control mass and control volume processes

Grading:

Homework	10%
Midterm exam I	25%
Midterm exam II	25%
Final exam	40%

Class Schedule

Week	Date	Subject	Reading
1	8/20	Introductions: motivation and application	1.1-1.2
	8/22	Properh	