EGN 3343H Thermodynamics Honors
Fall 2012
Department of Mechanical and Aerospace Engineering
University of Central Florida

Goals	Provide an introduction to the science and engineering of energy transfers and transformations, the hardware used to accomplish them, and the constraints (both fundamental and practical) that are encountered in the process. The lecture will focus on the principles of Thermodynamics and how to apply those principles in real engineering systems. You will learn how to determine properties of simple compressible systems. You will learn how to do balances of mass, energy, and entropy. And you will learn how to judge thermal efficiencies of real energy conversion devices.
Description	Energy, energy transfer, general energy analysis, properties of pure substances, closed and open systems, control volume, 2nd law of thermodynamics, entropy, gas power cycles, vapor and combined power cycles, refrigeration cycles.
Credit Hours	3 (3 lecture hours per week)
Instructor	Dr. Subith S. Vasu Engr 1-Room 216, Bldg 40 subith@ucf.edu
Textbook	Cengel & Boles, Thermodynamics, 7th Edition, McGrawHill (required). Chp:1-7, 9-11.
Reference	Additional notes will be distributed. Reference materials will be mentioned during lectures.
Meetings	Tuesday & Thursday 9:00 – 10:15AM BA- 2, 207
Office Hours	Tuesday & Thursday 10.15AM – 11:55AM, open door policy, send email to make appointment outside office hours
Exams	Exams may include conceptual questions and numerical calculations.

1st Exam	25 points	September 25 (Tuesday), in class
2nd Exam	25 points	October 30 (Wednesday), in class
Final Exam	50 points	December 11 (Tuesday), 7:00-10.50AM
Total	***100 points***	

Final Grade	$\geq$ 90: A 80-89: B 70-79: C 60-69: D 0-59: F
Homework	Homework problems will be assigned and solutions will be posted. Homework problems are the best way to apply your concepts. Homework will not be graded, but ***note that mastering homework problems may help performance in exams and quizzes.*** Examinations will include lecture and reading materials. A small project may be assigned as part of final exam.
Exam Policy	Any cheating in exams, in any form, will result in an automatic F for semester grade. Medical emergencies will be accepted for absence in exams only with a supporting letter from your physician. No make-up exams will be given for midterms, but final exam score will be scaled accordingly.