AME 312
Engineering Thermodynamics II
Spring 2019, RTH 109, M 11:00 am - 1:50 pm

Instructor: Fokion N. Egolfopoulos, Professor AME Dept.
Office: OHE 400B
Tel: 740-0480
E-mail: egolfopo@usc.edu
Office Hours: Anytime by appointment

Teaching Assistant: Ashkan Movaghar
E-mail: movaghar@usc.edu
Office Hours: Anytime by appointment

Text: Fundamentals of Thermodynamics, by Borgnakke & Sonntag (8th edition)

WEEKS TOPICS
1 Review of AME 310 (Chapters 1-6)
2, 3 Second law and its applications to simple systems (Chapter 7)
4 Exergy, Reversible Work, and Irreversibility (Chapter 8)
5, 6, 7 Power and Refrigeration systems (Chapters 9 & 10)
8 Gas mixtures (Chapter 11)
9 Thermodynamic relations (Chapter 12)
10 Spring break
11 Thermodynamic relations (Chapter 12)
12 Chemical reactions (Chapter 13)
13 Introduction to Phase and Chemical Equilibrium (Chapter 14)

Grading: Midterm Exam #1 February 25 (M) (11:00 am - 12:00 pm) 20%
Midterm Exam #2 April 1 (M) (11:00 am - 12:00 pm) 20%
Final Exam May 1 (W) (11:00 am - 1:00 pm) 40%
Homework Assignments 20%

Remarks:
1. Homework assignments will be given every Monday and will be due the following Monday; late work will not be accepted.
2. The use of laptops or cell phones to access the internet/e-mail during class and/or exams is not allowed. Such devices are allowed only to access material pertaining to the class.