

ME 4320 Thermodynamics II

- Semester:** Spring 2011
- Objectives:** The objective of this course is to apply the first and second thermodynamics laws to the advanced energy analysis. Advanced topics include thermodynamic cycles, thermodynamic relations, combustion, and vapor mixture.
- Class hour:** Mon., Wed.: 2:30 – 3:45 p.m.
Room No. D-208, Parkview Campus.
- Textbook:** "Thermodynamics, an Engineering Approach" 6th ed(?). by Y. Cengel and M. Boles, McGraw-Hill.
- Instructor:** Dr. Christopher Cho, Professor, P.E.
Dept. of Mechanical and Aeronautical Engineering, WMU
- Office:** Room F-236 Parkview Campus, WMU, Kalamazoo.
- Office Hours:** Mon, Wed., 9:30 – 10:20 a.m., 4:00 – 4:20 p.m.,
- Website:** homepages.wmich.edu/~cho

TOPICS to be covered

1. Ch 8: Exergy: A measure of work potential
2. Ch 9: Gas Power Cycles
3. Ch 10: Vapor and Combined Power Cycles
4. Ch 11: Refrigeration Cycles
5. Ch 13: Gas Mixtures
6. Ch 14: Gas-vapor Mixtures and Air-conditioning
7. Ch 15: Chemical Reactions

GENERAL POLICY

1. Make-up test will not be provided without acceptable justification. A grade of "zero %" will be given for the missed test.
2. Assigned HW will not be collected but will be reflected in Quiz.
3. No computer usage is allowed during the class hour.

GRADING SCALE

A: Above 90.0 %
BA: 85.0 -89.9 %
B: 80.0 - 84.9 %
CB: 75.0 - 79.9 %
C: 70.0 - 74.9 %
DC: 65.0 - 69.9 %
D: 60 - 64.9 %
E: below 60 %

TEST & HW

1 st mid Test :	30%
2 nd mid Test :	30%
Final Exam :	30%
Quiz:	10%
<u>Total :</u>	<u>100%</u>

Final Exam: April 27th (Wednesday), 2011, 12:30 – 2:30 p.m. according to WMU schedule.