Administrative:

Dr. Mark Wasikowski (Adjunct Lecturer) Mark.Wasikowski@unt.edu; Grader: Nima Class: MW 12:30 – 2:20 PM DP B157; Office: F115F MW 12:00 – 12:30 and 2:30 – 4:20;

<u>Course Description:</u> Zeroth, first and second laws of thermodynamics with applications to engineering and energy conversion, open and closed systems, thermodynamic properties of simple substances, equations of state, thermodynamic properties of mixtures, psychrometrics and psychrometric charts. Students must pass MATH 1720 (Calculus II) & PHYS 1710 (Mechanics) to enroll in this course.

Textbook: Fundamentals of Engineering Thermodynamics, 7th Edition, Moran, ISBN-13:9780470917688

Class Format: New theory presented during lecture using <u>PowerPoint</u>. PowerPoint is available on BB before lecture. Theory illustrated using by practical solving problem. Read textbook and review lectures ahead of time. Come to class with questions and ready to participate. Attendance taken often. Pop Quizzes or attendance quizzes may occur <u>anytime</u>. NO Late homework accepted due to compressed schedule. Course material and announcements are posted on Blackboard at <u>www.learn.unt.edu</u>. Any important notices regarding course will be sent to you by e-mail. Please make sure we have your correct UNT e-mail address and check your e-mail every now and then.

Grade Policy: grades based on 2 term exams, comprehensive final, participation, homework, pop quizzes. Homework problems often assigned, but not collected. Group collaboration on homework encouraged - small study groups. Make-ups will be given only for University excused absences, given notification beforehand. Re-grade requests accepted only the day handed back. Cell phone / electronics are not allowed during exams / quizzes - simple math calculators only. NO curve – straight 90/80/70/60 scale. Extra credit may be offered. Tentative Schedule:

Exam 1	20%	2 July	Chapters 1 - 3
Exam 2	20%	16 July	Chapters 4 - 6
Final	25%	8 August	Comprehensive

Participation & Attendance 20% Read lectures & text on time – participate in class

Homework & Pop Quizzes 15%

Tentative Course Outline:

Week	Topic	Book Chapter Reading
1	Fundamentals, Energy, First Law	1,2
2	Evaluating Properties	3
3	Control Volume Analysis Using Energy	4
4	Second Law of Thermodynamics	5
5	Review & Mid Term 1	
6	Entropy	6
7	Review & Mid Term 2	
8	Gas & Vapor Power Systems	8,9
9	Refrigeration & Heat Pumps	10
10	Psychrometrics & Review	12

Additional Class Policies:

- 1. The UNT Catalog procedures on cheating and plagiarism will be vigorously enforced. It is the duty of each student to protect their work so it is not available to others for submission as their efforts. This is especially true of files that are generated on the computer. Students that knowingly allow others to use their work are partners in this unethical behavior. All rules relating to academic dishonesty will be enforced in accordance with University policies.
- 2. State common law and federal copyright laws protect this course lectures and materials. They have my own original expression and revisions to the textbook author(s) and I record them at the same time that I deliver them in order. Whereas you are authorized to take notes in class, thereby creating a derivative work from my lecture, and/or make a print of my lecture notes/slides. The authorization extends only to making one set of notes for your own personal use and no other use. You are not authorized to record my lectures, to provide your notes to anyone else or to make any commercial use of them without express prior permission from me.

Academic Dishonesty:

According to the UNT Faculty Handbook, "academic dishonesty refers to the use of any unauthorized assistance, the acquisition (without permission) of academic material belonging to a faculty member, dual submission or resubmission of a paper or project without permission of the professor, and knowingly or negligently using paraphrase or direct quotation without full and clear acknowledgement. Misconduct for which students and/or groups are subject to discipline also includes knowingly furnishing false or misleading information to any university official (including faculty)." Academic dishonesty of any kind will not be tolerated in this class. If academic dishonesty is discovered, the student(s) involved will receive an automatic "F" in MEEN 2210. The maximum punitive penalty, permanent expulsion from UNT, will be sought for any student caught acting with academic dishonesty. If you are unsure whether a particular action or behavior constitutes academic dishonesty, ask the instructor for clarification before proceeding.

Disability Accommodation Policy:

All reasonable accommodation will be made to facilitate special needs. However, it is the student's responsibility to make any special needs known to the instructor. It is recommended that students with special needs first meet with the staff of the Office of Disability Accommodation (ODA), Union Suite 322, (940) 565-4323, then meet with the instructor. For more information, see http://www.unt.edu/oda.