

Thermodynamics, ENES 232, Section 401, CRN 31332, Spring 2019
 Class: SW 213, Time and Date: MW 5:00pm to 6:15pm
 Office: SC 442, Office hours: MW 4:30pm to 5:00pm
 Instructor: Benjamin Tsai, benjamin.tsai@montgomerycollege.edu, (301) 975-2347

Syllabus

Date Lecture	Chapters	Topics	Due	Suggested Problems & Legend
1/23	1	Introduction		1-{5a, 11, 16, 23, 32, 38, 47, 52},
1/28	2	Energy and First Law		2-{3, 10, 16, 22, 28, 33, 38, 44, 51, 55, 63,
1/30	1-2	Quiz 1	Q1	71, 76, 80, 87, 93},
2/4	3	Evaluating Properties		3-{5, 9, 15, 21, 27, 35, 41, 46, 54, 62, 69,
2/6	4	Control Volume Analysis		76, 81, 88, 94, 101, 107, 113, 118, 124,
2/11	3-4	Quiz 2	Q2	129, 136, 144},
2/13	1-4	Review for Exam 1		4-{3, 8, 16, 23, 30, 35, 44, 50, 56, 64, 74,
2/18	1-4	Exam 1	E1	85, 90, 102, 108, 112, 118, 128}
2/20	5	Second Law		5-{3, 13, 17, 20, 23, 28, 32, 37, 45, 50, 55,
2/25	6	Using Entropy		57, 60, 65, 68, 71, 73, 76, 79, 82, 85, 90},
2/27	5-6	Quiz 3	Q3	6-{3, 10, 13, 20, 28, 33, 39, 46, 54, 60, 68,
3/4	8	Vapor Power Systems		78, 82, 89, 93, 101, 108, 114, 121, 128,
3/6	8	Quiz 4	Q4	134, 140, 147, 154, 159, 166, 173, 181},
3/18	5, 6, 8	Review for Exam 2		8-{1, 7, 14, 20, 29, 34, 44, 49, 57, 60, 67,
3/20	5, 6, 8	Exam 2	E2	73, 81, 86}
3/25,27	9	Gas Power Systems		
4/1	9	Quiz 5	Q5	9-{1, 6, 13, 20, 26, 37, 46, 53, 62, 69, 75,
4/3,8	10	Refrigeration & Heat Pump		83, 89, 95, 101, 109, 117, 125, 129, 135},
4/10	10	Quiz 6	Q6	10-{1abc, 8abc, 15abc, 21abcd, 28abc,
4/15	9, 10	Review for Exam 3		33abc, 37abcd, 43abcd, 50abcd}
4/17	9, 10	Exam 3	E3	
4/22,24,29		Project Review		
5/1	1-6,8-10	Review for Final Exam		Key:
5/6	1-6,8-10	Final Exam	FE	E = Exam, FE = Final Exam, Q = Quiz

Grading Policy

Quizzes	20%
Projects	30%
Exams	30%
Final Exam	20%

Textbook: "Fundamentals of Engineering Thermodynamics" 8th edition by Moran, Shapiro, Boettner, & Bailey