

ME 321-1 WINTER 2012 THERMODYNAMICS

January 4, 2012

Class: MWF 9:00 – 9:50 324 MARB Instructor: Vladimir Soloviev lemborg.v@gmail.com
 Office Hours: MWF 10:00 – 11:00 133 CB 801-422-3051

HW#	Date	Class Discussion		Reading	Homework
1	Jan 4 Wd	Chapter 1	Basic Concepts	1: 1-2	7,8, 9
2	Jan 6 Fr			1: 3-8	19,20,22,33,36,42
3	Jan 9 Mn			1: 9-12	48,61,71,72
4	Jan 11 Wd	Chapter 2	General Energy Analysis	2: 1-5	17,27,29,32
5	Jan 13 Fr			2: 6	42,46,50
6	Jan 18 Wd			2: 7-8	66,,69,71
7	Jan 20 Fr	Chapter 3	Properties of Pure Substances	3: 1-4	1-7
8	Jan 23 Mn			3: 5	22,24,26,29,33
9	Jan 25 Wd			3: 5	38,43,47,49
10	Jan 27 Fr			3: 6	71,78,82,83
11	Feb 30 Mn			3: 7-8	86,87,90,94
Feb 1 Wd Exam #1					
12	Feb 3 Fr	Chapter 4	Analysis of Closed Systems	4: 1	2,6,10,11
13	Feb 6 Mn			4: 2	28,29,34,35
14	Feb 8 Wd			4: 3	48,50,54,65,81
15	Feb 10 Fr			4: 4	
16	Feb 13 Mn			4: 5	85,86,91,
17	Feb 15 Wd	Chapter 5	Analysis of Control Volumes	5: 1	1,2,3,10
18	Feb 17 Fr			5: 2	22,24
19	Feb 21 Tu			5: 3	25,26,27
20	Feb 22 Wd			5: 4	30,34,36
Feb 24 Fr Exam #2					
21	Feb 27 Mn			5: 4	49,51,53,67
22	Feb 29 Wd			5: 4	76,81,84
23	Mar 2 Fr			5: 4	91, 101,116
24	Mar 5 Mn			5: 5	118,123,126,130
25	Mar 7 Wd	Chapter 6	The Second Law of Thermodynamics	6: 1-3	16,20,23,27
26	Mar 9 Fr			6: 4-5	43,57
27	Mar 12 Mn			6: 6-9	62,63,67,69,70
28	Mar 14 Wd			6: 10	77,82
29	Mar 16 Fr			6: 11	97,102,110
Mar 19 Mn Exam #3					
30	Mar 21 Wd	Chapter 7	Entropy	7: 1-3	1-19 (odd), 22, 25
31	Mar 23 Fr			7: 4-7	30,46,52
32	Mar 26 Mn			7: 8-9	77,92
33	Mar 28 Wd			7: 10-12	108,128
34	Mar 30 Fr			7: 13	133,161
35	Apr 2 Mn	Chapter 9	Gas Power Cycles	9: 1-3	1-5,21
36	Apr 4 Wd			9: 4-5	6-10,26,30,31,39
37	Apr 6 Fr			9: 6-8	51,95
38	Apr 9 Mn	Chapter 10	Vapor and Combined Power Cycles	10: 1-2	1,2,16,23
39	Apr 11 Wd	Chapter 11	Refrigeration Cycles	11: 1-3	8,10,21
Apr 14-18 Testing Center Final Exam					

<p>TA: Sean Smith</p> <p>Email: sean.smith1121@gmail.com</p> <p>Phone: 801-830-3709</p> <p>Office hours in CB110:</p>	<table border="1"> <thead> <tr> <th></th> <th>M</th> <th>T</th> <th>W</th> <th>T</th> <th>F</th> </tr> </thead> <tbody> <tr> <td>8-9</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>9-10</td> <td>C</td> <td></td> <td>C</td> <td></td> <td>C</td> </tr> <tr> <td>10-11</td> <td>O</td> <td></td> <td>O</td> <td></td> <td>O</td> </tr> <tr> <td>11-12</td> <td style="background-color: black;"></td> <td></td> <td style="background-color: black;"></td> <td></td> <td style="background-color: black;"></td> </tr> <tr> <td>12-1</td> <td style="background-color: black;"></td> <td></td> <td style="background-color: black;"></td> <td style="background-color: black;"></td> <td style="background-color: black;"></td> </tr> <tr> <td>1-2</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2-3</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3-4</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4-5</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5-6</td> <td></td> <td style="background-color: black;"></td> <td></td> <td style="background-color: black;"></td> <td></td> </tr> </tbody> </table>		M	T	W	T	F	8-9						9-10	C		C		C	10-11	O		O		O	11-12						12-1						1-2						2-3						3-4						4-5						5-6					
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<p>Grader: Jesse Smith Email: jessejaysmith@gmail.com</p> <p>Late homework will not be accepted. Any extenuating circumstances should be discussed ONLY with the grader. Two lowest HW scores will be “dropped”.</p>																																																																			

Textbook

The text for the class is *Thermodynamics, an Engineering Approach*, 7th Ed., by Çengel and Boles. **Students are expected to read the material before it is covered in class.**

Homework

Homework assignments will come from selected problems at the end of each chapter as indicated in the class schedule. Credit will be given for problems completed, and a select subset of the assigned problems will be graded in detail.

Quizzes

Unannounced quizzes will be given in class, **which cannot be made up for any reason.** However, you will be able to “drop” 10% of quizzes given for the term. The quizzes will cover either material already covered, or material from the reading assignment.

Examinations

There will be three midterm examinations and one final exam. **Exams cannot be made up unless prior arrangements are made.** You must notify me of an emergency by telephoning me or by email *prior to class*. Only under unusual circumstances can a student arrange to take an exam *after* the regularly scheduled time.

The Final Examination will be comprehensive.

GRADING:

Homework	25%
Midterms (3)	45%
Final	15%
Quizzes	15%

The Fine Print: Here are some statements included at the suggestion of the University that inform you of some of your legal rights and responsibilities relative to this class.

Preventing Sexual Harassment BYU's policy against sexual harassment extends not only to employees of the university but to students as well. If you encounter sexual harassment, gender-based discrimination, or other inappropriate behavior, please talk to your professor, contact the Equal Employment Office at 422-5895, or contact the Honor Code Office at 422-2847.

Students with Disabilities BYU is committed to providing reasonable accommodation to qualified persons with disabilities. If you have any disability that may adversely affect your success in this course, please contact the Services for Students with Disabilities Office at 422-2767. Services deemed appropriate will be coordinated with the student and instructor by that office.