

## Contact Information

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## Course Information

Lecture: 8:00–9:10 am Days 135  
Room: 167 Peter Engel Science Center  
Textbook: *Fundamentals of Physics* by Halliday, Resnick, and Walker, Seventh Edition  
Web Site: <http://www.physics.csbsju.edu/211/>

## Introduction

This course will continue where Physics 200 left off. We will cover the rest of classical physics – thermodynamics, waves, and fluids.

## Homework Problems

Assigned homework problems for each chapter are included below. The problems from each chapter will be due the class day after we have finished covering the material from that chapter in class.

## Tests

The tests will have two parts: an individual portion and a group portion. The individual portion of the tests will consist of multiple choice questions and problems. The group portion of the tests will consist of a more difficult problem that you will solve as a group and hand in one solution. Before each group test, there will be at least one practice group test so that the groups have a chance to learn to work together. The group test will take place on the class period before the regular test. The final test will be solely an individual effort.

All of the tests will be closed book and closed notes. You will be given a sheet with all of the equations and constants that you need for the test, though you will have to remember how to apply them.

## Grading

The grades in this class will be based on 6 grades: 3 test grades, the final exam grade, homework, and a participation grade. Homework and each of the 3 tests will be worth 15% of the overall grade, while the final exam will be worth 30% and participation will be worth 10%. The participation grade will be based on participation in the practice group tests and other exercises in class.

**Course Schedule**

Cycle	Date	Sections	Topics	Tests	Homework
1-1	T 8/30	14.1–7	static fluids		7, 16, 19
1-3	R 9/01	14.7–9	moving fluids		38, 44
1-5	M 9/05	14.10	Bernoulli's eqn	practice group	53, 62, 79
2-1	W 9/07	18.1–6	temperature		6, 18
2-3	F 9/09	18.7–11	first law of thermo		36, 39, 40, 49
2-5	T 9/13	18.12	heat transfer	practice group	56, 60
3-1	R 9/15	19.1–6	ideal gases		4, 12, 22, 25, 30
3-3	M 9/19	19.7–10	distributions		42, 46, 50
3-5	W 9/21	19.11	adiabatic expansion	practice group	56, 59
4-1	F 9/23	14, 18, 19	Review	Group Test 1	
4-3	T 9/27	14, 18, 19	fluids, thermodynamics	Test 1	
4-5	R 9/29	20.1–4	entropy, second law		6, 12, 17
5-1	M 10/03	20.5–8	applied entropy		26, 29, 32, 39, 44, 69
5-3	W 10/05	15.1–4	simple harmonic motion	14, 24, 30, 35	
5-5	F 10/07	15.5–6	pendulums	practice group	48, 54
6-1	T 10/11	15.7–9, Handout	complex oscillations	60, 62, handout	
6-3	M 10/17	16.1–6	waves		4, 8, 20
6-5	W 10/19	16.7–8	waves equation	practice group	25, 27
7-1	F 10/21	16.9–13	interference, resonance		31, 36, 48, 54
7-3	T 10/25	20, 15, 16	Review	Group Test 2	
7-5	R 10/27	20, 15, 16	entropy, SHO, waves	Test 2	
8-1	M 10/31	17.1–5	sound waves		7, 11, 16, 20
8-3	W 11/02	17.6–8	intensity, beats		30, 42, 44, 48
8-5	F 11/04	17.9–10, 33.1–7	Doppler, light		54, 60, 64
9-1	T 11/08	33.8–10	reflection, refraction	practice group	28, 37, 50, 58, 66
9-3	R 11/10	34.1–5	images, mirrors		4, 12, 18
9-5	M 11/14	34.6–9	lenses, instruments		38, 54, 91
10-1	W 11/16	35.1–3	wave optics	practice group	9, 12
10-3	F 11/18	35.4–6	double slit		22, 26, 32
10-5	T 11/22	35.7–8	thin films		48, 56, 82
11-1	T 11/29	17, 33–35	Review	Group Test 3	
11-3	R 12/01	17, 33–35	sound and light	Test 3	
11-5	M 12/05	36.1–4	single slit diffraction		8
12-1	W 12/07	36.5–7	diffraction		13, 24, 26, 32
12-3	F 12/09	36.8–10	diffraction gratings		42, 54, 62
12-5	T 12/13	14–20, 33–36	Review		
2-4 pm	S 12/17	14–20, 33–36	Everything	Final Exam	