Contact Information

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Course Information

Lecture:	11:20–12:30 pm Days 246
Room:	173 Peter Engel Science Center
Textbook:	*College Physics* by Serway and Faughn, sixth edition, 1 or 2 volume version
Web Site:	http://www.physics.csbsju.edu/105/

Introduction

Welcome to Physics 105. This course is designed to give you the background in physics in order to better understand processes that you study in your field. Toward this end, we try to incorporate examples and lab activities which show you how the physics being studied can be applied in the "real" world.

Laboratory

Labs are an important part of learning physics. It is important that you come to labs prepared. This means you must read the appropriate sections from the lab manual and do whatever pre–lab work the manual describes before you come to lab. Proper preparation will help you understand the experiments that you are doing and complete the lab activities in the allotted time. More details on the labs are in the lab manuals.

Homework Problems

Suggested homework problems for each chapter are included in the Study Guide. Homework will *not* be graded, but you should do the problems, since problem solving is a big part of this class. If you don't do the problems it unlikely that you will do very well on the tests.

Tests

The test will have two parts: an individual portion and a group portion. The individual portion of the test will consist of multiple choice questions and problems. The group portion of the test will consist of a more difficult problem that you will solve as a group and hand in one solution. Before each group quiz, there will be at least one practice group quiz 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: lab grades, 3 test grades, the final exam grade and a participation grade. Labs 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	Lab (1-3)
1.2	R	8/28	1.1–1.9	Measurement		None
1.4	T	9/02	2.1–2.4	Position, Velocity		
1.6	R	9/04	2.5–2.7	Gravity	Practice Group Test	
2.2	M	9/08	3.1–3.3	Vectors		Uncertainty
2.4	W	9/10	3.4	Motion in 2 Dimensions	Practice Group Test	
2.6	F	9/12	3.5–3.6	Projectile Motion		
3.2	T	9/16	4.1–4.4	Newton's Laws		Data Analysis
3.4	R	9/18	4.5	Using Newton's Laws	Practice Group Test	
3.6	M	9/22	4.6	Friction		
4.2	W	9/24	1–4	Review	Group Test	Acceleration of Gravity
4.4	F	9/26	1–4	Motion and Forces	Test 1	
4.6	T	9/30	5.1–5.4	Energy		
5.2	R	10/02	5.5–5.8	Conservation of Energy		Reaction Time
5.4	M	10/06	6.1–6.2	Momentum	Practice Group Test	
5.6	W	10/08	6.3–6.4	Collisions		
6.2	T	10/14	7.1–7.4	Circular Motion		Projectile Motion
6.4	R	10/16	7.5–7.6	Centripetal Acceleration	Practice Group Test	
6.6	M	10/20	7.7–7.9	Law of Gravitation		
7.2	W	10/22	4–7	Review	Group Test	Ballistic Pendulum
7.4	F	10/24	4–7	Energy and Rotation	Test 2	
7.6	T	10/28	8.1–8.3	Torque		
8.2	R	10/30	8.4–8.7	Angular Acceleration		Rotational Motion
8.4	M	11/03	9.1–9.3	Matter, Pressure	Practice Group Test	
8.6	W	11/05	9.4-9.7	Fluids		
9.2	F	11/07	9.8–9.10	Fluid Properties		Archimedes' Principle
9.4	T	11/11	10.1–10.2	Temperature		
9.6	R	11/13	10.3	Thermal Properties	Practice Group Test	
10.2	M	11/17	10.4–10.6	Gases		Gas Behavior
10.4	W	11/19	8–10	Review	Group Test	
10.6	F	11/21	8–10	Matter and Temperature	Test 3	
11.2	T	11/25	11.1–11.3	Heat		None
11.4	T	12/02	11.4–11.7	Heat Transfer		
11.6	R	12/04	11.9–11.10	Applications of Heat		
12.2	M	12/08	12.1–12.4	Laws of Thermodynamics		Assessment Test
12.4	W	12/10	12.5–12.8	Entropy		
12.6	F	12/12	1–12	Review		
11–1 pm	W	12/17	1–12		Final Exam	