Physics 211 – Physics for Science and Engineering I

Section 1 (Fall 2008), 101 Lewis Hall, Tuesdays and Thursdays, 8:00 – 9:15 AM
Prof. Mihai Bondarescu
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NOTE: PHYS 221 (Lab Physics for Science & Engineering I) is a co-requisite for PHYS 211. If you are not enrolled in PHYS 221, you must register for it or you will be dropped from PHYS 211. If you have already successfully completed PHYS 221, let me know.

Office Hours:

Monday 3:00-4:00 PM, 126 Lewis Hall
Wednesday 3:00-4:00, 126 Lewis Hall

My main office is Room 5, Kennon
If you need to see me outside of office hours, please make an appointment. I am glad to work with you by email (although I can't ensure a timely response to email queries).

Textbook:

Fundamentals of Physics, 8th Ed., Halliday, Resnick, and Walker
We will cover selected material from Chapters 1-16, and 18.

Grading:

The grades are based on the following:

25 %	Final Exam
20 % each	2 Midterm Exams
20 % total	Quizzes (Most Wednesdays – except Exam weeks) *Typically 1 to 3 problems. The lowest two quiz scores are not counted.*
12 % total	Homework Assignments (Bi-weekly) *The lowest two homework scores are not counted.*
3 %	Class Participation *Students will be called on in class. You should be ready to respond to simple questions on the lecture material. The questions are usually taken from the Checkpoints in each chapter of the textbook.*

The homework assignments will have a Web based section and a written part. The web based part will be completed through the WileyPLUS web site at the following URL:
http://edugen.wiley.com/edugen/class/cls72060
Go to this web site and register. You are required to do this as the majority of our homework assignments will be web-based. When you purchased your textbook, you should have also gotten information on logging into the WileyPLUS system. (Wiley is the publisher of the textbook) Homework assignments will be posted on the Blackboard site in the afternoon on Tuesdays and Thursdays, and on the Wiley web site for the course. *Check both BLACKBOARD and WileyPLUS for assignments by 5pm day of class*.

Homework is due one week from the day it is assigned. The deadline for homework is the end of class for hand written problems and noon (12 PM) for web-based problems.

Note that **the total Quiz score is the same as a midterm exam**. I want to reward those students who work hard over the course of the semester and stay on top of the material. Think of the QUIZZES like a midterm exam given in week-by-week installments.

Grading Scale:

A: 100 – 87.5, B: 87.5 – 75.0, C: 75.0 – 62.5, D: 62.5 – 50.0 F<50.0

Rules:

Attendance is expected.
Be prepared to show your student ID or Driver's License on Exam days.
You may use the Student's Solutions Manual, HOWEVER *use of the Instructor's Solutions Manual is considered cheating. Students who use it will be subject to formal academic discipline charges.*

Learning Objectives:

After completing this course, the student should understand the physical principles of classical mechanics (such as forces, energy, and momentum) and have developed the necessary skills to solve problems by applying these principles. They should also have a grasp of the law of universal gravitation, and the essential role of oscillations and wave motion in physics.

Goals:

The central goal is for you to learn how to think about and apply physical concepts. This class will primarily focus on the laws of mechanics (how and why things move, and how to predict those movements). The main challenge you will face is in developing problem solving skills. Physics problems often involve several steps and usually they require more than just a simple application of formulas in the book. ***The problems may seem very difficult early on. It may take some time for you develop your skills and doing the homework is an essential part of the process.*** I am available to help you. I want you to do well. Come to my office hours, and/or use the Physics Tutoring Room. I am also willing to work with you over the phone. E-mail is another option (although I can't guarantee that you will always receive a timely response to e-mail inquiries).

Physics is inherently mathematical. A strong grasp of algebra and trigonometry are essential. You will also be expected to make use of differential calculus. Read ahead of the lectures. Get enough sleep, relax and get ready to stretch your brain.

Syllabus for Physics 211

Schedule (This is subject to change)

Date			Material
August	25	Math Test	Introduction
	27		Chap 1
	29	Quiz	Chap 2
September	1		LABOR DAY
	3		Chap 3
	5	Quiz	Chap 4
	8		Chap 5
	10		Chap 5
	12	Quiz	Chap 6
	15		Chap 6
	17	Quiz	Chap 7
	19		Chap 7
	22		Chap 8
	24	**Quiz**	Chap 8
	26	**Review Session**	
	29	**EXAM 1**	
October	1		Chap 9
	3	**Quiz**	Chap 10
	6	**Drop Deadline**	Chap 10
	8	Quiz	Chap 11
	10		Chap 11
	13		COLUMBUS DAY
	15		Chap 12
	17	**Review Session**	
	20	**EXAM 2**	
	22		Chap 13
	24	Quiz	Chap 14
	27		Chap 14
	29		Chap 15
	31	Quiz	Chap15
November	3		Chap 16
	5		Chap 16
	7	Quiz	Chap 17
	10		Chap 17
	12		Chap 18
	14	Quiz	Chap 18
	17		Chap 19
	19		Chap 19
	21	Quiz	Chap 20
	24	BREAK	
	26	BREAK	
	28	BREAK	
December	1		Chap 20
	3		Chap 20
	5	**Review Session**	
	8	**FINAL EXAM**	

We will hold study sessions for the two midterm exams. These will be held in Lewis Hall (usually 101 or 109) and we'll agree on a time/date that is best for the majority of the students.