

# Physics II – PHYS 2220

## Course Syllabus

Utah State University, Summer 2011

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### Basic Info

**Instructor:** Juan Trujillo

**Email:** [juan.trujillo@aggiemail.usu.edu](mailto:juan.trujillo@aggiemail.usu.edu)

**Text:** *Physics For Scientists and Engineers*, 2nd Edition, Randall D. Knight

**Location:** ESLC 046

**Class Time:** 8:40 - 9:40 am, M-F

**Prerequisite:** PHYS 2200/2210 or equivalent, MATH 1210 Calculus 1

**Office:** Geology Building, Room 401 (Physics Learning Center)

**Office Hours:** Mon – Thurs: 10:45 - 11:45.

### Welcome!

Welcome to Physics 2220, General Physics II! This course will pick up right where Physics I left off. We will basically cover the second half of the listed textbook, from chapter 20 on. The main concepts of this course include: waves, electricity and magnetism, circuit analysis, relativity, quantum mechanics, and nuclear physics.

### Prerequisites

Prerequisites for this course include General Physics I and Calculus I. These courses are absolutely required, and this course cannot be successfully completed without them. Calc II and III are strongly recommended.

### Homework

Homework makes the world go round. Working out physics problems is critical to understanding the material. You must work on homework every day in order to build a sound understanding. You may work together on any and all homework assignments. Homework will be assigned often: generally twice a week. Homework will be assigned via the online homework system Mastering Physics ([www.masteringphysics.com](http://www.masteringphysics.com)). Late assignments will lose 20 % of their overall score for every day that they are late. New textbooks come with an access code to use the website, but those who purchase used books must purchase an access code on the Mastering Physics website.

The online course ID for this course is **TRUJILLO2011**.

### Blackboard

The Blackboard system will be used for three purposes in this course:

1. Post grades
2. Post course materials
3. Homework discussion

The third item may need some elaboration. Blackboard contains a discussion board utility, which we will use as an extra source of homework help. The idea is to generate student discussion about homework problems. If a student is having trouble with a homework problem, then the question can be posted to the discussion board, and other students are free to respond with help, additional questions, or clarification. This seems like a cool tool, so let's see if it's any good.

## Labs

Normally, we would have weekly labs, but since the physics labs are being reworked and are currently under construction to be ready for the fall of 2011, we will not be having labs in this course.

## Tests

There will be three midterm tests and a final exam. Tests will take place every other Friday, as indicated on the schedule below. One 3x5 note card will be allowed for notes on each midterm, and two on the final although each test will contain all the necessary equations. You may put any material you wish on the note cards.

## Late Work

Late homework will not be accepted. You must be working on homework every day if you plan on mastering the material and doing well on the tests. If you miss a test, and have a valid alibi (e.g. have to take your child to Primary Children's Hospital) and we will work out a time for a makeup test.

## Attendance

While you will not be graded on attendance, I strongly encourage you not to miss even a single class. If you do happen to miss a lecture, make sure you contact another student to find out what you missed. I will try to post the material on the class website to give you an idea of where we stand.

## Grading

The grading breakdown is split between each component of the course: homework, lab, midterms, and the final. The following grading scale will be used to assign final grades:

Homework	30%
Lab	15%
Midterms	30%
Final	25%

92% - 100%	A	90% - 92%	A-	88% - 90%	B+
82% - 88%	B	80% - 82%	B-	78% - 80%	C+
72% - 78%	C	70% - 72%	C-	68% - 70%	D+
60% - 68%	D	< 60%	F		

## Tentative Schedule

Week #	Date	Chapters	Test?
1	June 13th	20, 21, 22	No
2	June 20st	22, 23, 24, 25	<b>YES</b>
3	June 27th	26, 27, 28	No
4	July 4th	28, 29, 30	<b>YES</b>
5	July 11th	31, 32, 33	No
6	July 18th	33, 34, 35	<b>YES</b>
7	July 25th	37, 38, 39, 40	No
8	Aug 2nd	40, 41, 42, 43	<b>FINAL</b>

## **Summer Course Disclaimer**

This is a summer course, which means the material will be presented very quickly. It is VERY important to keep up with reading and homework. Make sure not to fall behind, or else you may never catch up!!!

## **Students With Disabilities**

Any student requiring accommodations or services due to a disability must contact the Disability Resource Center in room 101 of the University Inn. DRC can arrange to provide course materials (including this syllabus) in alternative formats if necessary. You are welcome to discuss any special needs with me, though you are not required to do so.