



## PHY 2048 Physics I Spring 2007

<http://www.phys.ufl.edu/phy2048/>

**Lecturers** Prof. Peter J. Hirschfeld  
Prof. Andrey Korytov

**Lectures** M2-T2-F2 or M3-W3-F3 (8:30 or 9:35 am), NPB 1001

**Discussions** One session per week—see the course website for your assignment

**Office hours  
and contact  
information**

Wayne Bomstad	R5	NPB 2038	392-4033	bomstad@phys.ufl.edu
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Larry Price	T5 F4	NPB 2157	392-0139	price@phys.ufl.edu
Karthik Shankar	T5 T6	NPB 2064	392-2921	karthik@phys.ufl.edu
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Prof. Whiting	W6 W7	NPB 2079	392-8746	bernard@phys.ufl.edu

### **General Comments**

This course is primarily for those students who are majoring in one of the so-called hard sciences. In order to succeed in the class, the student should have a good working knowledge of algebra, trigonometry, and calculus. The course seeks to provide a reasonable blend of theory (concepts of physics) and problem-solving techniques based on the theory.

Physics, like most subjects in science, is best learned by "doing" it; that is, by using the theory and intuition to solve problems. The ability to do this is developed **only by practice**. Cramming for exams and mechanical memorization of formulae is a recipe for a disaster. Doing homework problems at the end of each chapter beyond of what is formally required and keeping up with the lectures are the critical factors that will define whether you succeed or fail in this course. The goal of doing problems is to build up a confidence in that (a) you understand the concepts and (b) know how to apply them for solving problems. Questions arising during such practice should be used as a guide toward further studies and discussions with your instructors during recitation sessions and office hours.

You will have one quiz question during every lecture on the current material. To help prepare for this, we strongly recommend that you read the assigned textbook material **before coming to lectures**.

### **Required material**

- **Textbook *Fundamentals of Physics*** by Halliday, Resnik, Walker, 7th Edition, Volume 1 (parts 1 and 2)
- **WebAssign card** provided by the publisher. If you have purchased the bundle of parts 1 and 2 of the book together with the WebAssign card, that card will give you the access code. Alternatively, you can buy the card separately at the bookstore. Also, you can register on-line <https://www.webassign.net/> using a credit card (for further instructions, see the course web site). Detailed instruction on how to register can be found on the course web site.
- **HITT (Hyper-Interactive Teaching Technology) remote control**, facetiously known as a 'garage opener'. One brief quiz will be given during every lecture, for which you will need this remote to record your answer. If you have one from the past, you can use it. If you are buying a new one, please use the following link <http://www.phys.ufl.edu/~mocko/NewRFRemote.html> that will help you select the correct one. Older HITT remotes are based on the infrared technology, the newer ones—on the radio-frequency technology. Both will work fine in our class room. Before you can use your HITT remote, you must register it using the following link <http://www.phys.ufl.edu/~hitt/>.

## Grading

There are four components that will formally contribute toward your final grade.

**Exams:** There will be 3 partial exams with 15 questions each during the semester and a 20-question final. One of the three mid-term exams will be dropped to allow for all kinds of circumstances. The final exam cannot be dropped. No exam make-ups will possible. Mid-term exams will be conducted in evenings. You are allowed to bring one 8-½ inch by 11-inch sheet of paper with anything in *handwriting* on it (you can use both sides of the sheet). For the final exam, you can have three such “cheat sheets”. An electronic calculator, pencils, and scrap paper are needed for the exams—it is your responsibility to bring these items. You cannot have cell/blackberry phones in the class during exams (even if you intend to use them as calculators).

**Quizzes:** Throughout the semester, the discussion section instructors will give you a total of 10 quizzes. The two lowest scores will be dropped before calculating the final discussion section score. No quiz make-ups will be possible in any circumstances. During discussion session quizzes, you will NOT be allowed to use “cheat sheets” and calculators.

**WebAssign:** Each week, you will have a set of homework problems posted on the WebAssign site <https://www.webassign.net/login.html>. The WebAssign homework is due on Sundays 11:00 pm (13 assignments total). We recommend that you complete these assignments well before that so as to avoid possible mishaps with internet connectivity or computer system crashes. *There will be no drops and/or make-ups for the WebAssign homework.* A trial WebAssign homework, not counted toward your grade, is due on Sunday, January 14.

**HITT:** During each lecture you will have one quick quiz question on the current material that you will answer using your HITT remote. To check out your remote, the trial questions will be offered during the lectures of January 10 and 12. The first lecture quiz to be counted towards your grade will be given on Wednesday, January 17. The lowest 20% of these quiz grades will be dropped to allow for mechanical/electrical failures and absences.

**Homework problems at the end of each chapter** are the main source of practice and learning in this course. It is strongly suggested you do as many as possible on your own.

### Contributions toward the Final Score

Two out of three partial exams each count 20%	40%
Comprehensive final exam	25%
Discussion section quizzes (8 best of 10)	15%
WebAssign (13 assignments, no drops)	15%
HITT lecture quizzes (best 80% of all)	5%

**Final Grades** You are guaranteed the following grades with the following percentage scores:

A	85.0%
B+	80.0%
B	72.0%
C+	67.0%
C	60.0%
D+	55.0%
D	50.0%

### Grade of "Incomplete"

The College of Liberal Arts and Sciences requires that a grade of "I" (Incomplete) may not be assigned unless all three of the following requirements are met: (1) The student and instructor have discussed the situation prior to the final exam. (2) The student has completed a major portion of the course with a passing grade. (3) The student is unable to complete course requirements because of documented circumstances beyond his or her control.

**Schedule**

Mon	Tue	Wed	Thu	Fri	Sat	Sun
8-Jan Intro	9-Jan	10-Jan Ch 1	11-Jan	12-Jan Ch 2	13-Jan	14-Jan trial hw
15-Jan MLK Ch 2	16-Jan	17-Jan Ch 2	18-Jan	19-Jan Ch 3	20-Jan	21-Jan hw 1
22-Jan Ch 4	23-Jan	24-Jan Ch 4	25-Jan	26-Jan Ch 4	27-Jan	28-Jan hw 2
Review Test 1	30-Jan	Ch 5	1-Feb	2-Feb Ch 5	3-Feb	4-Feb hw 3
5-Feb Ch 5	6-Feb	7-Feb Ch 6	8-Feb	9-Feb Ch 6	10-Feb	11-Feb hw 4
12-Feb Ch 6	13-Feb	14-Feb Ch 7	15-Feb	16-Feb Ch 7	17-Feb	18-Feb hw 5
19-Feb Ch 8	20-Feb	21-Feb Ch 8	22-Feb	23-Feb Ch 8	24-Feb	25-Feb hw 6
26-Feb Review	27-Feb Test 2	28-Feb Ch 9	1-Mar	2-Mar Ch 9	3-Mar	4-Mar hw 7
5-Mar Ch 10	6-Mar	7-Mar Ch 10	8-Mar	9-Mar Ch 10	10-Mar	11-Mar hw 8
12-Mar	13-Mar	14-Mar	15-Mar	16-Mar	17-Mar	18-Mar
<b>Spring Break</b>						
19-Mar Ch 11	20-Mar	21-Mar Ch 11	22-Mar	23-Mar Ch 11	24-Mar	25-Mar hw 9
26-Mar Ch 12	27-Mar	28-Mar Ch 12	29-Mar	30-Mar Ch 12	31-Mar	1-Apr hw 10
2-Apr Review	3-Apr Test 3	4-Apr Ch 13	5-Apr	6-Apr Ch 14	7-Apr	8-Apr hw 11
9-Apr Ch 14	10-Apr	11-Apr Ch 14	12-Apr	13-Apr Ch 16	14-Apr	15-Apr hw 12
16-Apr Ch 16	17-Apr	18-Apr Ch 16	19-Apr	20-Apr Ch 17	21-Apr	22-Apr hw 13
23-Apr Ch 17	24-Apr	25-Apr Ch 17	26-Apr	27-Apr Review	28-Apr Final	29-Apr

**Jan 19 update:** Test 1 date is now confirmed for Monday, Jan 29 (not Wednesday as was tentatively posted earlier)

**University Policies**

- Students with disabilities requesting special classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting special accommodations.
- The University's honesty policy regarding cheating and the use of copyrighted materials applies.
- For counseling and mental health services, please consult the University of Florida website.