PHY2054 Syllabus - Physics 2 Fall 2010

Course WEBsites: There are three PHY2054 WEBsites that you will need to use.

(1) The Physics Department PHY2054 WEBsite at

http://www.phys.ufl.edu/courses/phy2054/fall10/

This site contains the class announcements, the assigned homework problems, the course schedule, exam room assignments, and the course syllabus. You should check the class announcements on a regular basis.

(2) The University of Florida E-Learning PHY2054 WEBsite at

https://elearning.courses.ufl.edu/webct/logon/5557659936031/

This site contains previous exams, correct answers for your exams, the class lectures, and the course grades. Estimated course grades will be posted here after each of the two exams and your final course grades will be posted here after the final exam. This site also contains your username, institution code, and initial password for the **WebAssign** on-line homework.

(3) The WebAssign PHY2054 WEBsite at

http://www.webassign.net

This is where you do the on-line homework. Your username, institution code, and initial password are listed on the PHY2054 E-Learning WEBsite. You will also need the access code that comes with your textbook.

Course Instructors:

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Prof. David Reitze – Ph. 392-3582, email: phy2054@phys.ufl.edu, Office: 2265 NPB.

Course Coordinator:

Prof. Rick Field – Ph. 392-5702, email: phy2054@phys.ufl.edu, Office: 2043 NPB.

Office hours are posted on the course website.

Only e-mails to phy2054@phys.ufl.edu will receive a response. E-mail to the instructor's direct accounts will be ignored.

<u>Textbook:</u> The required text: College Physics with WebAssign, Authors: Serway, Vuille, and Faughn, Publisher: Cengage, Edition: 8th Volume 2, ISBN: 1111020906 (Note that this ISBN number is unique to the University of Florida and is sold only at local bookstores. The text includes a code used for the required on-line homework.) A student solution manual is also available. Homework in this course is graded and will count towards your final grade. The homework is done online, using the WebAssign system. Your textbook will contain your access code to WebAssign.

<u>Homework:</u> On-line graded homework is due by 11:00pm almost every Friday starting on September 3, 2010. To get onto the online homework system you will need to enter the access code that came with the textbook. You will also need your username, institution code, and initial password which is provided on the PHY2054 E-Learning

WEBsite. You must use the username provided on the PHY2054 E-Learning WEBsite! However, you should change your initial password when you login for the **first time.** The problems come from your textbook. However, the numbers are randomized for each student (i.e. the problems will be same as the textbook but with different numbers). You will have **five** tries to get the problem correct answer. You will not be counted off for "significant figures", however to get credit your answer must be correct within 2%. For most of the problems WebAssign will give you a "hint" after the third incorrect try. For about half of the assigned problems **WebAssign** will provide you the "solution" after the third incorrect try. The "solution" will be for the problem in the textbook. After studying the "solution" you will have two more tries to get the correct answer. For about half of the assigned problems you will not be given the solution. You must learn how to do these problems on your own. The course Schedule Page gives the assigned problems and due dates. Once the due date/time (e.g. Friday/11:00 pm) has passed no further input of answers for credit will be accepted. It is your responsibility to get your homework in on time. Last minute computer/local server problems will not excuse you from this responsibility. In doing the online homework you can get help in discussion section, office hours, and from tutors. To provide a measure of forgiveness for illnesses and possible network problems, 10% of the on-line homework grades will be dropped in evaluating your final grade. The on-line homework portion of the course will count for 15% of the overall course grade.

WebAssign On-Line Homework Schedule

WebAssign On-Line Homework Schedule				
Assignment	Due Date (by 11:00pm)	Material		
HW Set 1	Friday September 3	Chapters 15.1-16.3		
HW Set 2	Friday September 10	Chapters 16.4-16.8		
HW Set 3	Friday September 17	Chapters 16.9-17.4		
HW Set 4	Friday September 24	Chapters 17.5-18.3		
HW Set 5	Friday October 8	Chapter 18.4-19.6		
HW Set 6	Friday October 15	Chapter 19.7-20.3		
HW Set 7	Friday October 22	Chapter 20.4-21.13		
HW Set 8	Friday October 29	Chapter 22.1-22.7		
HW Set 9	Friday November 12	Chapter 23.1-23.5		
HW Set 10	Friday November 19	Chapter 23.6-24.4		
HW Set 11	Friday December 3	Chapter 25.1-25.6		

<u>Discussion Section Quizzes:</u> <u>Discussion sections start the first week of classes (i.e. August 23, 2010) and quizzes start on September 1, 2010.</u> A quiz will be administered during many of your <u>Wednesday</u> or <u>Thursday</u> discussion section meetings (10 total quizzes). The quizzes will test how well you learned the concepts and methods of the assigned homework problems. The quiz will be very closely related to your homework problems. The problems may be restructured to provide guidance, allow awarding of partial credit and discourage memorization of only the formula for the solution. You are expected to learn how to do the homework problems *on your own without any notes or other help (i.e.* there are **no crib sheets for the quizzes!**). In doing the online homework

you can get help in discussion section, office hours, from tutors and from other students. However, in the end you must learn the methods needed to do the problems on your own. The quizzes will give partial credit (0-5 points) so if you set up the problem correctly but make an algebraic mistake you will get some of the credit for the problem. You will be permitted documented (e.g. medical note) absences from the discussion sections, with make-ups for missed quizzes to take place at the first opportunity determined by your TA. To provide a measure of forgiveness for possible missed quizzes, 10% of the quiz grades will be dropped in evaluating your final grade. The quiz portion of the course will count for 20% of the overall course grade.

Quiz Schedule*

Quiz Schedule ⁴				
Week	Date	Quiz Problem		
1	8/23/10-8/27/10	No Quiz		
2	9/1/10-9/2/10	Q1: Chapter 15.1-15.4		
3	9/8/10-9/9/10	Q2: Chapter 15.5-16.3		
4	9/15/10-9/16/10	Q3: Chapter 16.4-16.8		
5	9/22/10-9/23/10	Q4: Chapter 16.9-17.4		
6	9/27/10-10/1/10	No Quiz		
7	10/6/10-10/7/10	Q5: Chapter 18.1-18.7		
8	10/13/10-10/14/10	Q6: Chapter 19.1-19.6		
9	10/20/10-10/21/10	Q7: Chapter 19.7-20.3		
10	10/27/10-10/28/10	Q8: Chapter 20.4-21.13		
11	11/1/10-11/5/10	No Quiz		
12	11/8/10-11/12/10	No Quiz		
13	11/17/10-11/18/10	Q9: Chapter 23.1-23.5		
14	11/22/10-11/26/10	No Quiz		
15	12/1/10-12/2/10	Q10: Chapter 23.6-23.3		
16	12/6/10-12/8/10	No Quiz		

^{*}Quizzes are on Wednesday or Thursday.

Exams & Final: Two in-term exams and a cumulative final exam. The date and time for each exam, and the chapters it covers are listed on the Course Schedule Page. These exams will not take place in your lecture hall in the physics building. Room assignments for where you must go to take the exams will be announced during class in the days leading up to the exam and posted on the course web page. Exams are multiple choice with your answers bubbled in on Scantron sheets. Mark your answers carefully. What you mark will determine your score (independent of your having meant otherwise). To each in-term exam you may bring a single *hand written* formula sheet on 8½ x 11 inch paper (both sides) and you should bring a calculator (calculators may not be shared and may not have electronic communications capability), #2 pencils, an eraser and your picture ID (preferably your UFID). Scrap paper will be provided. To the final exam you may bring one additional (2 total) *hand written* formula sheets. If you miss one of the two exams during the semester, a valid excuse will allow you to take the cumulative make-up

exam to replace the zero on the missed exam. Valid excuses are officially sanctioned UF events, medical excuses or family emergencies. There will be one cumulative make-up exam (covering material from both exams) given on Wednesday, December 8, 2010. The grade on this make-up exam will replace the missed exam. The two in-term exams and the final exam will be equally weighted and count for 60% of overall course grade. None of the exam grades will be dropped.

Exam Schedule

Date	Time	Exam	Material	Crib Sheets
Wednesday 9/29/10	8:20pm-10:10pm	Exam 1	Chapters 15.1-17.7	1
Monday 11/8/10	8:20pm-10:10pm	Exam 2	Chapters 18.1-22.7	1
Wednesday 12/8/10	TBA	Make-Up	Chapters 15.1-25.6	2
Saturday 12/11/10	10:00am-noon	Final Exam	Chapters 15.1-25.6	2

Practice exams are available at the PHY2054 E-Learning WEBsite.

Student Response System (H-ITT): Graded in class H-ITT questions begin on Tuesday September 7, 2010, but you should get your remotes sooner for practice questions that will help you to become familiar with the system before the questions starting counting toward your grade. You should each purchase the H-ITT remote transmitter associated with the in-class student response system. This transmitter will let you respond to questions posed during class. Your response will be recorded. Simply responding will get you 1 point credit for the question, while responding correctly will get you 2 points credit. To get the credit you must register on the system. To register click http://www.phys.ufl.edu/~hitt/ at your earliest opportunity and follow the instructions on that page. It is your responsibility to ensure that your remote is functioning properly and that you are sending on the correct channel (see web site above for link to instructions for setting the remote channel). It is recommended that you set the channel at the start of each lecture. Lights on the remote will indicate that your answer has been recorded on the system. The student response grade will count as 5% of your overall course grade. To provide a measure of forgiveness for unavoidable missed classes and for problems with the H-ITT transmitter, 20% of the HITT problems will be dropped in evaluating your overall course grade.

How to succeed in this course: (1) It is expected that a successful student will invest at least twelve hours studying and problem-solving per week outside of class. Do not expect a good grade if you are not prepared to work this much. (2) Read the assigned chapters before coming to lecture. The importance of this cannot be overemphasized. (3) Work as many problems as possible on a weekly basis; the assigned (graded) ones represent the minimum recommended set. Go to instructor's and discussion leaders' office hours for individual help (this can be highly effective and should be regarded as free tutoring; make use of it!). To maximize the availability of this help you can go to any Instructor or Section Leader's office hours. These will be posted on the course page, once they are established. (4) Keep up on a regular basis; cramming doesn't work for learning physics.

Overall Course Grade: Your course letter grade will not be based on a curve but rather on the *fixed scale* shown the table below. The advantage of the fixed scale is that you are not competing with other students to "get ahead of the curve." Everyone who works hard can do well in the class. It is possible that the entire class can receive A's (all scores would be 85% or better). Those who do not do the work will score accordingly. The overall grade is based on 100 points maximum (Exam 1 = 20 points, Exam 2 = 20 points, Final Exam = 20 points, Quizzes = 20 points, Homework = 15 points, HITT = 5 points). Your overall course score will be calculated to 5 significant figures and there is no rounding off.

Grading Summary:

Exam 1	20%
Exam 2	20%
Final-Exam	20%
Quizzes*	20%
Homework*	15%
HITT**	5%
Total	100%

^{*10%} will be dropped.

A	≥ 85%
A-	≥ 82%
B+	≥ 80%
В	≥ 70%
B-	≥ 67%
C+	≥ 65%
C	≥ 60%
C-	≥ 58%
D+	≥ 55%
D	≥ 50%
D-	≥ 45%
Е	< 45%

The formula that will be used to calculate your overall course grades can be found at http://www.phys.ufl.edu/courses/phy2054/fall10/grade_formula.pdf.

Honor Code: The UF Honor Code applies to all aspects of this course. It is required that you report any possible infractions to your instructor immediately.

Students with disabilities: Students requesting classroom accommodation for disabilities 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 accommodation.

^{**20%} will be dropped.