

PHY2054 Syllabus - Physics 2 Spring 2016

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/spring16/>

This site contains the class announcements, office hours, the homework problems, the course schedule, exam room assignments, the course syllabus, previous exams, and the correct answers for your exams (after you have taken the exam). You should check the class announcements on a regular basis.

(2) The **University of Florida Sakai e-Learning Spring 2016 PHY2054** WEBSITE at

<https://elearning2.courses.ufl.edu/portal/site/UFL-PHY2054-83711-12016>

This site contains 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. It also contains and the class lectures.

(3) The **McGrawHill-Connect PHY2054 – Spring 2016** WEBSITE at

<https://connect.mheducation.com/class/r-field-spring-2016>

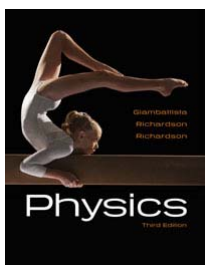
This is where you do the on-line homework.

Course Instructors:

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Office hours are posted on the course website.



Textbook: The textbook for the course is McGraw-Hill, **PHYSICS (with McGrawHill-Connect), Volume 2, 3rd Edition**, by: Giambattista, Richardson, and Richardson (ISBN: 9781259629525). Note that this ISBN number is unique to the University of Florida and is sold only at local bookstores. It includes one-semester access for the **Connect** online homework with **Ebook/Learnsmart**. It does not include any printed copy of the textbook. If you prefer you can purchase the textbook and the **Connect** online homework separately.

Discussion Section Quizzes: **Discussion sections start the first week of classes (i.e. Tuesday January 5, 2016) and quizzes start on January 20-21, 2016.** A quiz will be administered during many of your discussion section meetings (**10 total quizzes**). The quizzes for those students with MW or WF discussion sections will be on the Wednesday's shown on the schedule below. The quizzes for those students with TR discussion sections will be on the Thursday's shown on the schedule below. The quizzes will test how well you learned the concepts and methods of the assigned on-line homework problems. The quiz will be very closely related to your on-line 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!**). The quizzes will give partial credit and be graded **0 to 5 points**. 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 allowed to make-up a maximum of three missed quizzes provided that you have a valid documented excuse (*e.g.* medical note). You will have to take the make-up quiz within 3 weeks of your missed quiz and there will be **no make-up quizzes after April 22, 2016**. To provide a measure of forgiveness for possible missed quizzes, **10% of the quiz grades will be dropped in evaluating your final grade**. **The discussion section quiz portion of the course will count for 15% of the overall course grade.**

Quiz Schedule*

Week	Quiz	Date	Material
1		1/4/16-1/8/16	No Quiz
2		1/11/16-1/15/16	No Quiz
3	1	(MW & WF) Wednesday 1/20/16 (TR) Thursday 1/21/16	Chapter 16.1-16.7
4	2	(MW & WF) Wednesday 1/27/16 (TR) Thursday 1/28/16	Chapter 17.1-17.4
5	3	(MW & WF) Wednesday 2/3/16 (TR) Thursday 2/4/16	Chapter 17.5-18.4
6	4	(MW & WF) Wednesday 2/10/16 (TR) Thursday 2/11/16	Chapter 18.5-18.10
7		2/15/16-2/19/16	No Quiz
8	5	(MW & WF) Wednesday 2/24/16 (TR) Thursday 2/25/16	Chapter 19.1-19.10
9		2/29/16-3/4/16 Spring Break	No Quiz
10	6	(MW & WF) Wednesday 3/9/16 (TR) Thursday 3/10/16	Chapter 20.1-20.7
11	7	(MW & WF) Wednesday 3/16/16 (TR) Thursday 3/17/16	Chapter 20.8-21.2
12	8	(MW & WF) Wednesday 3/23/16 (TR) Thursday 3/24/16	Chapter 21.3-21.7
13		3/28/16-4/1/16	No Quiz
14	9	(MW & WF) Wednesday 4/6/16 (TR) Thursday 4/7/16	Chapter 22.1-23.5
15	10	MW & WF) Wednesday 4/13/16 (TR) Thursday 4/14/16	Chapter 23.6-24.4
16		4/18/16-4/22/16	No Quiz

*Quizzes are in the discussion sections.

On-line Homework: **On-line homework is due by 11:00pm almost every Sunday starting on January 17, 2016.** To get onto the online homework system you will need to enter the access code that came with the textbook. 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). Once the due date/time (*e.g.* Sunday 11:00 pm) has passed no further input of answers will be accepted. In doing the online homework you can get help in discussion section, office hours, and from tutors. However, you must do the problems yourself. Your on-line homework scores will be weighted by how well you do on the quiz that follows the homework assignment. For example, if HW_n is your score on the n^{th} homework assignment and Q_n is your score on the n^{th} quiz, then you will receive the following quiz \times homework grade

$$(Q \times HW)_n = \frac{Q_n \times HW_n}{5}.$$

If your quiz score is 4 points or higher (out of 5 points) then you will receive full credit for the corresponding quiz \times homework grade no matter what your score was

on that homework assignment (even if you did not do the homework assignment!).

There is no quiz associated with HW Set 11. For HW Set 11, $(Q \times HW)_{11} = HW_{11}$. To provide a measure of forgiveness for possible missed homework assignments or quizzes, **10% of the quiz \times homework grades will be dropped in evaluating your final grade.**

The quiz \times homework portion of the course will count for 10% of the overall course grade.

McGrawHill-Connect On-Line Homework Schedule

Assignment	Due Date (by 11:00pm)	Material	Associated Quiz (date)
HW Set 1	Sunday January 17	Chapter 16.1-16.7	Quiz 1 (1/20-1/21)
HW Set 2	Sunday January 24	Chapter 17.1-17.4	Quiz 2 (1/27-1/28)
HW Set 3	Sunday January 31	Chapter 17.5-18.4	Quiz 3 (2/3-2/4)
HW Set 4	Sunday February 7	Chapter 18.5-18.10	Quiz 4 (2/10-2/11)
HW Set 5	Sunday February 21	Chapter 19.1-19.10	Quiz 5 (2/24-2/25)
HW Set 6	Sunday February 28	Chapter 20.1-20.7	Quiz 6 (3/9-3/10)
HW Set 7	Sunday March 13	Chapter 20.8-21.2	Quiz 7 (3/16-3/17)
HW Set 8	Sunday March 20	Chapter 21.3-21.7	Quiz 8 (3/23-3/24)
HW Set 9	Sunday April 3	Chapter 22.1-23.5	Quiz 9 (4/6-4/7)
HW Set 10	Sunday April 10	Chapter 23.6-24.4	Quiz 10 (4/13-4/14)
HW Set 11	Sunday April 17	Chapter 24.5-25.9	None $(Q \times HW)_{11} = HW_{11}$

Student Response System (H-ITT): You will be able to earn bonus points toward your overall course grade by coming to class and answering the H-ITT questions, however, participating in the H-ITT in class questions is purely optional. You can earn a perfect grade in the course (i.e. 100 points) without the H-ITT bonus points.

On **Thursday January 7** you will be given an H-ITT practice question that will help you to become familiar with the system before the questions start counting for bonus points. The H-ITT questions will begin counting toward your bonus points on **Tuesday January 12**. You should 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. **You can earn a maximum of 5 bonus points toward your overall course grade by answering the H-ITT questions.** To provide a measure of forgiveness for unavoidable missed classes and for problems with the H-ITT transmitter, **20% of the HITT questions will be dropped in evaluating your bonus points.**

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 exam 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. We will provide a formula sheet on the exam. This formula sheet will contain information necessary to do the problems. The formula sheet will be posted on the PHY2054 course WEBSITE a week before your exam so that you can see what information will be on the exam. **In addition, you will be allowed to bring one crib sheet to the exams.**

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 April 20, 2015**. 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 75% of the overall course grade. None of the exam grades will be dropped.**

Exam Schedule (tentative)

Date	Time	Exam	Material
Tuesday 2/9/16	8:20pm-10:10pm	Exam 1	Chapters 16.1-18.10
Wednesday 3/23/16	8:20pm-10:10pm	Exam 2	Chapters 19.1-21.7
Wednesday 4/20/16	5:10pm-7:00pm	Make-Up	Chapters 16.1-25.9
Saturday 4/23/16	10:00am-noon	Final Exam	Chapters 16.1-25.9

Previous exams are available for practice at the PHY2054 course WEBSITE.

Students with disabilities: Students requesting special accommodations on the in-term exams and the final exam must follow the instructions at

<https://www.dso.ufl.edu/drc/students>

Students must initiate an accommodated testing request (ATR) for each exam to be scheduled at the DRC (*i.e.* Exam 1, Exam 2, Final Exam). The PHY2054 instructors will review the request via E-mail and either accept or decline the request as submitted. The ATR must be completed at least four (4) business days before the scheduled exam date. The Accommodated Testing Service (ATS) at DRC will then administer the exam.

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. The overall grade is based on 100 course points. The two in-term exams and the final exam will be equally weighted and count for a maximum of 75 course points. Your discussion section quiz scores will count for a maximum of 15 course points and your quiz×homework scores will count for a maximum of 10 course points. Your H-ITT bonus course points (max = 5) will be added to your overall course points. However, the maximum number of points for the course is 100 points. If adding in the bonus points gives you more than 100 points, you will only get the full 100 maximum points. Your overall course score will be calculated to 3 significant figures and there is no rounding off.

Grading Summary:

Assignment	Max Course Points
Exam 1	25
Exam 2	25
Final-Exam	25
Quizzes*	15
Quiz×Homework*	10
Total Points	100
H-ITT** Bonus	5

*10% will be dropped.

**Optional bonus points.

A	≥ 85
A-	≥ 80
B+	≥ 75
B	≥ 70
B-	≥ 65
C+	≥ 60
C	≥ 55
C-	≥ 50
D+	≥ 45
D	≥ 40
D-	≥ 35
E	< 35

The formula that will be used to calculate your overall course grade can be found at http://www.phys.ufl.edu/courses/phy2054/spring16/grade_formula.pdf.

Normalization of the Quiz Scores: At the end of the semester we will compute the overall average quiz score for each of the PHY2054 TA's. We will make no change to the quiz grades for those students in the classes of the TA with the highest average. We will add "bonus" quiz points to all the other students in such a way as to make all the averages the same as the TA with the highest average. However, if doing so gives you more than 15 points for your overall quiz grade, then you will only get the full 15 points.

Normalization of the Quiz times Homework Scores: At the end of the semester after the quiz grades are normalized we will recalculate the Quiz×Homework scores. However, if doing so gives you more than 10 points for your overall Q×HW grade, then you will only get the full 10 points.

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 website, once they are established. (4) Keep up on a regular basis; cramming doesn't work for learning physics.

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.