

# PHY XXX - PRINCIPLES OF PHYSICS - Spring 2013

14 January 2013 to 10 May 2013

**LECTURE:** 11:00 am- 11:55 am on MWF in ... [55 minute classes, 3 times a week]

**INSTRUCTOR:** TBA

**TEXTBOOK:** *Physics - Principles with Applications*, Sixth Edition, Douglas C. Giancoli, 2005.

**RECITATION:** Recitation classes meet on Thursday. **Registration in a recitation class is required.** The recitation focuses on preparation for the following week's homework assignment. Your recitation instructor will be available to answer questions. Before each recitation class, it is recommended that you review the textbook readings and your lecture notes. There is recitation the first week of class. Sign the attendance sheet.

**HOMEWORK:** The homework assignment for each recitation class is listed on the reverse side. Your homework, neatly written with pages stapled together, is due at the start of the recitation class. Show your work and underline or **box in** your answers. **No late homework will be accepted.** Answers will be posted on the second floor of Fawcett Hall during the week following their due date. Selected parts of each homework will be graded. Missing homework will receive a grade of zero. One homework grade will be dropped.

**LABORATORY:** **Concurrent registration in, or previous completion of, PHY 101 is required.** Laboratory classes will not meet during the week of 20 August. See Mr. William Wagner, Laboratory Director, (239 Fawcett) about problems related to the laboratory class.

**QUIZ:** A quiz on the reading assignments will be administered each week via WebCT. The quizzes are to be completed by 10:45am each Monday, unless otherwise noted on the next page. You will receive a grade of zero for any quiz that you miss. One quiz grade will be dropped. If you have any problems with your account or WebCT, let me know BEFORE that quiz is due. Quizzes are open book.

**EXAMINATIONS:** Four hour-long exams will be administered as listed in the schedule. The fourth exam will be administered during the first hour of the final exam period. Questions will be based on the assigned sections of the textbook, the lectures, on-line quizzes, and the homework assignments.

You will receive a grade of zero for any scheduled exam that you miss. An **optional** hour-long make-up exam *on the same material as the first three hourly exams* will be administered during the second hour of the final exam period. Your grade on the optional make-up exam can replace your exam 1, exam 2 OR exam 3 grade (whichever was lowest), if the make-up exam grade is higher. If the make-up exam grade is lower than your exam 1, exam 2 and exam 3 grades, it will not count towards your grade. There is no make-up exam for the fourth in-depth exam or for the make-up exam.

You may prepare one 8 ½" by 11" formula sheet for use during each exam. No other papers or books may be used except those distributed with the exam. You must provide your own scientific calculator and pencils. Spare batteries, pencils, and working erasers are recommended. Only one cheat sheet is allowed in each exam, including the make-up exam.

In the event of a storm or other disruption, if the University is open the exam will take place as scheduled.

## Class, homework, and on-line quiz Schedule

Monday Lecture	Wednesday Lecture	Friday Lecture	Thursday Recitation Home work due at beginning of class*
14 Jan Intro/Chapter 16	16 Jan Chapter 16	18 Jan Chapter 16	17 Jan No quiz this week. Recitation meets Chap 16 #2, 4, 12, 23, 27, 31 No lab.
21 Jan MLK Day <b>No classes</b>	23 Jan Chapter 17	25 Jan Chapter 17	24 Jan Quiz covers Ch 16-17 Chap 17 # 1, 6, 14, 32, 46, 47
28 Jan Chapter 17	30 Jan Chapter 18	01 Feb Chapter 18	31 Jan Quiz covers Ch 18 Chap 18 # 5, 11, 12, 26, 43, 48
04 Feb Chapter 18	04 Feb Chapter 19	08 Feb Chapter 19	07 Feb Quiz covers Ch 19 Chap 19 # 6, 14, 15, 23, 35, 44
11 Feb <b>Exam 1</b> (Ch 16-19)	13 Feb Chapter 20	15 Feb Chapter 20	14 Feb Quiz covers Ch 20 Chap 20 # 2, 5, 29, 32, 49
18 Feb Chapter 21	20 Feb Chapter 21	22 Feb Chapter 21	21 Feb Quiz covers Ch 21 Chap 21 # 6, 11, 18, 20, 30, 34
25 Feb Chapter 22	27 Feb Chapter 22	01 Mar <b>Exam 2</b> (Ch 20-21)	28 Feb Quiz covers Ch 22 Chap 22 # 5, 6, 7, 16, 39
04 Mar Chapter 23	06 Mar Chapter 23	08 Mar Chapter 23	07 Mar Quiz covers Ch 23 Chap 23 # 8, 16, 26, 38, 43, 49
11 Mar <b>Spring Break</b>	13 Mar <b>Spring Break</b>	15 Mar <b>Spring Break</b>	
18 Mar Chapter 24	20 Mar Chapter 24	22 Mar Chapter 24	21 Mar Quiz covers Ch 24 Chap 24 # 1, 8, 14, 17, 27, 36
25 Mar Chapter 25	27 Mar Chapter 25	29 Mar Chapter 25	28 Mar Quiz covers Ch 25 Chap 25 # 2, 6, 12, 22, 29, 39
01 Apr <b>Exam 3</b> (Ch 22-25)	03 Apr Chapter 26	05 Apr Chapter 26	04 Apr Quiz covers Ch 26 Chap 26 # 15, 16, 20, 22, 25
08 Apr Chapter 26	10 Apr Chapter 27	12 Apr Chapter 27	11 Apr Quiz covers Ch 27 Chap 27 # 1, 4, 6, 7
15 Apr Chapter 28	17 Apr Chapter 28	19 Apr Chapter 28	18 Apr Quiz covers Ch 30 Chap 30 # 1, 9, 18, 33, 36, 40
22 Apr	24 Apr	26 Apr	25 Apr

\*Note: Homework problems subject to change.

**Final exam (Ch 26, 27, and 30):** Friday 10 May 10:45 am - 11:45 am [exam week Dec 5-9]

**Make-up exam (Ch 16-25):** Friday 10 May 11:50 am - 12:50 am

### NOTES:

I based this schedule off of Miami University's academic calendar. I think WSU will have one fewer week than I've included (per AAUP we will have 15 week terms, with 14 weeks of instruction and one week of finals). To accommodate the WSU proposed schedule, I have left one week "free".

While the chapters logically break down into semesters as outlined, time-wise there is a time crunch the first term. We could move Ch 15 – thermodynamics to the second semester. Not as nice a grouping of material, but it would allow a more reasonable pace through the early chapters of Newton's law, etc. We can also have (at least) one fewer exam to free up instructional time.

## TOPICS:

Chapter 16: Electric Charge and Electric Field  
Chapter 17: Electric Potential  
Chapter 18: Electric Currents  
Chapter 19: DC Currents  
Chapter 20: Magnetism  
Chapter 21: Electromagnetic Induction  
Chapter 22: Electromagnetic Waves

Chapter 23 Light: Geometric Optics  
Chapter 24: The Wave Nature of Light  
Chapter 25: Optical Instruments  
Chapter 26: Special Theory of Relativity  
Chapter 27: Early Quantum Theory and Models of the Atom  
Chapter 30: Nuclear Physics and Radioactivity

**ACADEMIC INTEGRITY** refers to the “integral” quality of the search for knowledge that a student undertakes. The work a student produces, therefore, ought to be wholly his or hers; it should result completely from the student’s own efforts. A student will be guilty of violating academic integrity if he/she a) knowingly represents work of others as his/her own, b) uses or obtains unauthorized assistance in the execution of any academic work, or c) gives fraudulent assistance to another student. [McGlynn, 2001].

Wright State University strictly enforces violations of academic integrity. Past violations include collaborating with others on graded course work including in class exams, take-home tests, on-line quizzes, and homework assignments. For more information see <http://www.wright.edu/students/judicial/> Know the policy – ignorance is not a defense.

<b>GRADING:</b>	Four in-depth exams	400 points	To receive an “A”:	$575 \times 90\% = xxx = A$
	Homework assignments	120 points	“B”:	$575 \times 80\% = xxx = B$
	Weekly Reading Quiz	<u>55 points</u>	“C”:	$575 \times 70\% = xxx = C$
	<b>Total score</b>	<b>575 points*</b>	“D”:	$575 \times 60\% = xxx = D$
			“F”:	Below xxx = F

## \*EXTRA CREDIT

Your grade is based on a total of 575 points, as outlined above. It is possible to finish the term with more than 575 points. There are two means of obtaining extra credit points:

**Quizzes:** Each reading quiz question contributes a half point towards your total score. The 55 points contributed by the reading quizzes towards the total score is based on reading quizzes of ten questions each. Some quizzes have more than ten questions which provide an opportunity for extra credit. It is therefore possible at the end of the term to have more than 55 points from reading quizzes contributing to your total score.

**Class Participation:** Sign-in attendance sheets and/or using clickers during lecture will earn you up to 10 additional points during the term. These points are in addition to the 575 points outlined above. A randomly selected sign-in sheet from recitation class will also earn you up to 3 additional points.

**HELP** may be obtained from your lecturer or your recitation instructor. A help room is available at no cost in 213A Fawcett Hall. Times to be announced. See WebCT homepage. Additional practice problems are available at the book's web site <http://physics.prenhall.com/giancolippa> or in the optional **Student Study Guide** available at the bookstore.

**WEBCT** To access materials on WebCT you need to have a WSU computer account. If you don't have a WSU computer account, you can get one from CATS in the Library Annex. To access WebCT go to <http://wisdom.wright.edu>. Click on "log-on", then enter using your WSU username and password. On next screen, all your registered courses that use WebCT will appear. Select PHY111.

**CLICKER REGISTRATION** (you can obtain clickers at the bookstore)

1. Go to the website [student.turningtechnologies.com](http://student.turningtechnologies.com)
2. Enter your ResponseCard ID (found on back of clicker)
3. Enter your first name and last name in the appropriate fields
4. "Other Field" can include your UID or be left empty
5. Complete security entry
6. Press Next
7. Enter instructor's email address ([sarah.tebbens@wright.edu](mailto:sarah.tebbens@wright.edu))
8. Select class name that you are in for this instructor (PHY 111) and add it to the list on the right
9. Click Next and confirm information. You may click Back if you find information you need to correct.