Physics 2530-02

GENERAL PHYSICS 1

Spring 2009

Instructor: Hal Evensen evensenh@uwplatt.edu **Engineering Hall 228** 342-1531 http://www.uwplatt.edu/~evensenh

Monday Tuesday Wednesday Thursday Friday 8:00 9:00 Office Office 10:00 PH2530 PH2530 PH2530 PH2530 11:00 Office Noon PH3140 PH1210 lab PH3140 PH3140 1:00 Office PH1210 lab meeting 2:00 EP3930 EP3930 Office EP3930 3:00 Office EP3930 Office Office 4:00 Office to 4:30 Office to 4:30 Office to 4:30 Office to 4:30 5:00

OFFICE HOURS and CLASS SCHEDULE

Meetings outside of office hours OK – you may need to phone/email ahead. Unavailable Thursdays.

Text: Young and Freedman, University Physics, 12th ed. (2008). **Pre-requisite:** "C" or better in Math 2640;

Co-requisite: Math 2740

Rough Outline and Exam Schedule:

Chapters	Exam	Date	Time	
(<u>approximately</u> !)				
1, 2, (3)	One	Friday, February 6	10:00 – 10:52 AM	
3,4	Two	Tuesday, February 17	10:00 – 10:52 AM	
5, 6, (7)	Three	Tuesday, March 10	10:00 – 10:52 AM	
7, 8, 9	Four	Wednesday, April 8	10:00 – 10:52 AM	
10, 15, 16	Five	Friday, May 1	10:00 – 10:52 AM	
CUMULATIVE	FINAL	Tuesday, May 12	5:00 – 6:52 PM	

Exam Policy:

The exam schedule is fixed to allow us all to plan ahead for the semester. No make-up exams! I will not change the date or time of an exam; exam content may be modified from the table above in order to match the pace of the course. Note that the Final is a common, shared exam.

If you miss one exam with an acceptable reason, your final exam score will substitute for the missed exam. Any further missed exams count as zeros. "Acceptable" reasons are determined on a case-by-case basis: talk to me, as early as possible!

Pre- and Post- tests

In an effort to improve how we (your professors) teach physics, Prof. Young has won a grant from the National Science Foundation. Part of this research includes a pre- and post-test that all students will take. This test will not affect your grade - it is purely for internal assessment, and student names are stripped from the data (to which your instructor has no access). To encourage your participation, taking the pre-test will add 1.0 points to your lowest exam score, and taking the post-test in week 15 will add (another) 2.0 bonus points. You will receive a release form on the first day of class.

To find the quizzes, go to this course's D2L (<u>Learn@UW</u>) site, and click on "Quizzes." **The pre-test is due by the end of the first week**, and will take roughly 30 minutes. The post-test will be available during the final week of classes.

Homework and Expectations

In general, it is expected that students will need to devote a significant amount of time to a challenging course; i.e. to spend on the order of two hours outside of class for every hour spent in class. This time can be spent reading the chapter, working on selfassessment questions, and solving physics problems (the "ultimate test" of one's knowledge!).

Roughly <u>ten to twelve homework problems</u> will be assigned for each chapter, using the online homework service MasteringPhysics.com. Several "tutorial" problems will be assigned through MasteringPhysics, in addition to end-of-chapter problems. Keep current with these problems in order to keep up with the course. Problems will be available before beginning the next chapter in class, and you will have at least one full week to work on them. Additionally, I will link the lecture material to the problems as we go. After their due date, solutions will be posted and placed on reserve in the library (inquire at the front desk for my course reserve file).

One of the strengths of MasteringPhysics is the "tutorial problems," which can help you learn by "walking you through" a problem. We have found that these are very helpful to student understanding (and grades!).

Every student thus will have the opportunity to get a decent score on the homework portion of this course. You will be allowed <u>six</u> submissions per question, but a small (2%) penalty applies for each wrong answer submitted. Additionally, there is a 2% bonus for any unopened "hints" that may be available for a problem. The maximum MP score is 100%. *Late policy: solutions submitted up to one week late, 50% credit.*

Finally, to give you access to as many example problems as possible, a "Student Solutions Manual" to a previous textbook will be placed on course reserve in the library, to provide more examples.

See below for MP instructions.

Discussion Class:

The Discussion period will typically be held every week – see the calendar. This period is intended for answering your questions, discussing problems and concepts, and the occasional in-class assignment, graded primarily on effort. This works best if, <u>before the discussion periods</u>, students submit a brief statement, <u>preferably via email</u>, containing: "Things in this class I don't understand/questions I have." I read these in preparation for the discussion period, to make it more productive.

Group Problems

Some days (no particular schedule) will be devoted to somewhat-challenging group problems, related to material covered the previous week. Depending on the day, I may choose students randomly to present their solution to the class at the end of the period. These questions may require some assumptions and may have more than one answer. Each group will turn in their solution, which will be graded (in order) on <u>clarity</u>, <u>effort</u>, *then* <u>physics</u>. I reserve the right to vary the format of this period. If you are missing during a group problem day, you will receive a zero on that assignment. Let me know beforehand for approved absences.

Calculators, Formulas, and Physical Constants:

Any calculator with a display no larger than 1.5" x 2.5" may be used, such as the TI-85. **I will provide a formula sheet for exams only, and it will be posted beforehand.** It is recommended that this be used as "insurance" and not a "crutch." The values of physical constants will be provided for quizzes and exams.

Grading Scale: A:	100 – 90;	B:	89 – 80;	C:	79 – 70;	D:	69 – 60;	F:	< 60
e			Cours	o C	rada				

Course Graue.	
Group Problems/Participation:	6% total
Online Homework Problems:	10% total
Five In-Class Exams:	14% each
Final Exam:	14%

Attendance Policy:

Students are expected to attend class on a regular basis and are responsible for all lecture material and assigned readings.

Lecture-Lab Drop Policy:

A student who drops the lecture, Physics 253, must also drop the laboratory, Physics 251. You may drop the laboratory and remain in the lecture. <u>The last day to drop full semester courses is March 23, 2009</u>. **Disabilities Accommodation:**

Any student who may need an accommodation due to a disability should make an appointment to see me during my office hours. A VISA from Services for Students with Disabilities authorizing your accommodations will be needed.

Religious Accommodation:

Students have the right to miss class for religious observations. Students wishing time off for this reason should let their instructors know within the first two weeks of class.

Absences:

Sometimes absence from class is unavoidable because of illness. Such illness should be reported to the Student Health Services. Emergencies other than illness that cause absence from classes should be reported to the Office of Student Affairs. Such students are expected to meet with me as soon as possible after the crisis has passed and arrange to make up any missed work.

Fine Print:

Anyone with eyestrain from reading this fine print is entitled to a free vision exam.

Academic Misconduct:

Students are responsible for the honest completion or representation of their work, for the appropriate citation of sources, and for respect of others' academic endeavors. Students who violate these standards must be confronted and must accept the consequences of their actions. (p. 179-Student Handbook)

Mastering PhysicsTM

Your textbook, *University Physics* by Young and Freedman, is supplemented by an online library of text, homework, tutorials, and assessment tools called Mastering Physics[™]. Maybe you've heard students talk about using Mastering Physics[™] with the previous textbook, but with this textbook it's better.

Mastering $Physics^{TM}$ provides you with several on-line tools to help you learn physics.

- 1. The textbook on-line. You can read and refer to the text anywhere you have access to an on-line computer without lugging around the book.
- 2. On-line homework that gives you instant feedback. The problems will be assigned by the instructor.

3. ActivPhysics OnLineTM - a comprehensive library of applets and applet-based tutorials. Your text indicates which tutorials go with the section, and you can access any or all of these tutorials in Mastering Physics. Your instructor does not have to assign them.

4. Škill building and self-tutoring problems to help you learn the material before you tackle the end-of-chapter problems. Your instructor will assign these as (s)he sees fit.

Students who purchase their textbooks also purchase a PIN for Mastering Physics[™]. Since you rent your textbook, we will also provide the PIN, but it doesn't come free. You will be charged \$XX for the PIN this semester, and an additional yet-to-bedetermined amount (\$18-\$20) if your instructor uses Mastering Physics[™] in Physics II. The charges will automatically show up on your bill. **The user account you'll establish is good for both semesters of the course, so don't lose your username and password**. The PIN would cost \$48 if you had to buy it from the bookstore.

Instructions for creating your Mastering Physics[™] account and logging in:

- 1. Go to <u>www.masteringphysics.com</u>. Register under New Students.
- 2. Click that you have an access code, then accept the license agreement.

3. Select NO to the "Do you have a Pearson Education Account?" Then enter the access code from your STUDENT ACCESS KIT.

4. Enter the information requested. USE YOUR UNIVERSITY EMAIL ADDRESS as your username. Pick your own password; just make sure you can remember it for Physics II (although Mastering Physics[™] is able to remind you if you forget).

5. Follow the rest of the instructions to complete registration. (Platteville zip is 53818; there is a help video and plenty of help links)

6. After you have completed registration, exit and then go back to <u>www.masteringphysics.com</u> and log in to your new account. When it asks for Course

ID, enter **MPEVENSEN253002**. (The course title is "PH2530 Spring 2009 Evensen".)

7. Once you're on the course site, go to Assignment List to see your assignments.

- a. The first assignment, *Introduction to Mastering Physics*, is a simple introduction, graded for practice.
- b. The second assignment, for Chapter 1, is due in one week.

		JANUARY		
Monday	Tuesday	Wednesday	Thursday	Friday
19	20	21	22	23
WK 1	20	<u> </u>		23
No class	Classes begin/syll./Ch. 1			Ch 1/2
26	27	28	29	30
WK 2		disc		Ch. 3
		FEBRUARY		
Monday	Tuesday	Wednesday	Thursday	Friday
2	3	4	5	6
WK 3		disc		Exam 1
9	10	11	12	13
WK 4				
Ch. 4				disc
16	17	18	19	20
WK 5				
Ch. 5	Exam 2			disc
23	24	25	26	27
WK 6	Ch. 6			disc
		MARCH		· · · · · · · · · · · · · · · · · · ·
Monday	Tuesday	Wednesday	Thursday	Friday
2	3	4	5	6
WK 7				
	Ch. 7			disc
9	10	11	12	13
WK 8				
	Exam 3	Ch. 8		disc
16	17	18	19	20
WK 9 SPRING BREAK				
23	24	25	26	27
WK 9		1.		
Last day to arop		uisc		CII. 9

		APRIL		
Monday	Tuesday	Wednesday	Thursday	Friday
30	31	1	2	3
WK 10		UWP Distinguised Lect	EMS EXPO	
		No class 10-12	NO ENGINEERING	dice
6	7	8	CLASSES Q	10
WK 11	· · ·	Exam 4	5	10
Ch. 10				Good Friday
13	14	15	16	17
WK 12				
"Easter Monday"		disc		Ch. 15
20	21	22	23	24
WK 13		1.		
27	28	disc 29	30	Cn. 16
WK 14	20	25	50	Exam 5
,, 1		dsic		Exam 5
		MAY		
Monday	Tuesday	Wednesday	Thursday	Friday
4	5	6	7	8
WK 15				disc
disc	disc	disc		Star Trek Movie
11	12	13	14	15
FINALS WEEK				
	PH2530 FINAL 5:00 PM - 6:52 PM			
18	19	20	21	22
25	26	27	28	29
			20	23
1	2	3	4	5
L	1			

I have received Mastering PhysicsTM Student Access Kit Number ______. (Enter the hand printed number from the front of your access kit)

Name ______ Date_____