

Physics 111 – Spring 2008 – San Francisco State University

Lecturer: Ludmila Kisseleva-Eggleton

Email: lkissele@stars.sfsu.edu

Office: TH 520, phone: 338-2515

Office Hours: MWF 12-1pm

or 925-465-4359 (emergency only!)

There is a 1 unit supplemental instruction course - SCI 111 - held in trailer p4 on Mondays @ 9.30-11AM. Some of you may find it very useful.

Prereqs:

- required previous coursework: algebra, geometry, trigonometry.
- A passing grade on the **Physics Dept. Math Preparedness exam**, which will be administered during the **SECOND MEETING OF LECTURE**. (see separate handout for info)

Required Materials:

- 1.) **Physics 3rd ed.**, by Walker. (Prentice-Hall, 2007) (blue cover). You may purchase **either** the hardbound version, **or** the paperback volume I.
- 2.) a WebAssign system registration code. This is a paperless transaction—you will purchase this on-line about 1-2 weeks into the semester, after your log-in is enabled. (Details will follow about this in lecture and on the course web page.)
- 3.) other **supplemental materials are available**, but **not required**. These can be obtained at the bookstore and/or online at: www.prenhall.com/walkerphysics. There is a link to this website on the course webpage, in the upper right hand corner.

Lecture 1: MWF 11:10-12, SCI 101

Lecture 2: TTh 9:35-10:50am, SCI 210

Laboratory (Phys 112):

- **Concurrent enrollment** in lecture and laboratory is required. If you drop out of lecture before the withdrawal deadline you must also drop lab.
- All labs will meet starting the first full week of classes, starting Monday 1/29. Attendance is required to this meeting, so that you do not get dropped. This will be a brief registration period only. The first experiment will be held the following week.
- Bring the following materials to the first experiment: the lab manual (comes with the text, or sold separately) and a hardbound, cross-ruled lab notebook.

Web info:

All class handouts (including HW assignments, solutions, practice exams) will be posted on the **course web page**, which is:

<http://www.physics.sfsu.edu/~lkissele>

Note that is the official course web page, and should be your jumping-off point. The WebAssign website (see below) only serves to administer your HW to you, so you will miss important announcements and materials by going only there.

Everything you need to know about homework:

Where do I get the homework assignments?

HW assignments will usually be posted on the web Thursday afternoons. These will be entirely on the WebAssign system. Further information on how to use this system will be provided separately (handout will be posted on course web page).

When is homework due?

The cutoff for submitting answers to the WebAssign system will generally be Thursday afternoons, but may vary. The exact date/time of the deadline will be clearly printed at the top of each HW assignment, which you should note each week, as there will sometimes be deviations from our normal routine, depending on how lecture is progressing. **Once the deadline passes, the system will not accept answers.**

Exams:

There will be **two midterm exams** and a **final exam**. Please do not count on the midterm occurring on an exact date, though I have given my very best estimates below. I will give at least two week's notice for the exact midterm dates. The final exam date is included below, and will not be moved.

Final Grade Breakdown:

Homework = 20 %, Midterm 1 = 20%, Midterm 2= 25%, Final 35%

- The final is cumulative, but with an emphasis on material after the last midterm.
- The class will be curved; the mean is usually set to B-.

Rough Schedule (can be changed by instructor):

Week	Dates:	Topics:	Reading: (Walker chapters)	Comments:
1	1/25	introduction; math exam, SI units	1	
2	1/28-2/1	1D: position, displacement, velocity,	1-2	
3	2/4-8	acceleration; freefall; graphing	2	
4	2/11-15	vectors; 2D motion; projectile motion; Newton #1,#3	2-3	
5	2/19-22	2/18 – NO CLASS : Presidents' Day Newton #2; forces: normal, tension, weight,	3-5	
6	2/25-2/29	static & kinetic friction; circular motion & centripetal force; universal gravitation;	4-6, 12	
7	3/3-7	work/energy; power; energy conservation;	7-8	
8	3/10-14	non-conservative forces; momentum: impulse, Collisions;	9	Exam 1. Typically covers HW#1-5.
9	3/17-21	center of mass; angular motion	10-11	
10	3/24-28	No classes – Spring break No lecture Mon 3/31 (Cesar Chavez Day)		
11	4/1-4	torque: static equilibrium, rotational inertia	10-11	
12	4/7-11	Rotational KE; rolling condition; angular momentum	10 -11	
13	4/14-18	Spring forces, simple harmonic motion: mass on spring, pendulum;	13	
13	4/21-25	FLUIDS: density, pressure, bouyant force, volume flow rate, bernoulli's;	15	Exam 2. Typically covers HW#6-9.
14	4/28-5/2	WAVES: on a string, sound, Doppler effect, standing waves; musical instruments	14	
15	5/5-9	time permitting, THERMO: temperature, thermal expansion, heat, heat capacity, phase change	16-17	
16	5/12-14	spillover & review		
		Monday May 19 10:45 – 1:15 p.m.		Final Exams.

Note: It is your responsibility alone to confirm/manage your enrollment in this course:

- If you **fail the math entrance exam**, or **no longer wish to continue** with the course mid-semester, make sure to **drop yourself**.
- Remember that lecture and lab enrollments are treated separately by the registrar. **If you drop lecture before the W deadline, you must also make sure to drop lab.**