**Instructor:** Dr. Gary Pennington

Room 3107 Physics Bldg., Phone: x56024

Email: gpenning@umd.edu

Office Hours: MW 8-9 pm, F 7-8 pm, or by appointment

Schedule: Lectures: M, Tu, W, Th, F 5:30 – 6:50 pm Room 1201 PHY

Recitations: M, W 7:00-8:00 pm Room 1201 PHY Lab: 7:00-9:00 pm Room 3306 PHY

**Course Description:** This is the first semester of a two-semester sequence in introductory physics. The subjects covered this semester will be mechanics, energy, and heat. This is a non-calculus sequence, but it does make extensive use of algebra, trigonometry, and elementary geometry. Prerequisite for the class is: previous work in trigonometry, MATH 112, or MATH 115.

## **Required Materials**

- Textbook: College Physics, Vol. 1, 2nd Edition, by R.D.Knight
- Mastering Physics access code (comes with a new book, or you can purchase separately from the bookstore or www.masteringphysics.com).
   CourseID: MPPENNINGTON33943
- Clicker (response card RF LCD)
- Physics 121 Laboratory Manual, UMCP (Wellstood)

**Exams:** There will be four exams during the semester, which occur during a regular discussion or lecture class. The final exam is cumulative. The preliminary schedule (subject to change) is as follows:

Thursday, May 7th
Tuesday, May 19th
Tuesday, June 3rd
Friday, June 6th

5:30 – 6:50 pm (Midterm 1)
5:30 – 6:50 pm (Midterm 2)
5:30 – 6:50 pm (Midterm 3)
5:30 – 6:50 pm (Final)

Makeup exams will only be given for those with a valid <u>documented</u> excuse. If you know ahead of time that you will miss an exam you <u>must</u> notify me before the exam. If you miss an exam due to an emergency let me know as soon as you can, by any means possible.

**Homework**: Regular homework is assigned to try to insure that you are keeping up with the course material and to act as a measure of your understanding of the material. If you are having difficulty with the homework this is a sure sign that you should seek some assistance. Students are encouraged to work together on homework but **each person must submit their own homework and numeric answers will in general not be the same for each student.** Details on the academic honesty policy can be found at www.testudo.umd.edu/soc/dishonesty.html.

We will be using *Mastering Physics* to **assign and grade** the homework problems on the web. In order to do well on the exams and quizzes, solutions to the homework problems should also be written out. You should be able to explain each step of your solution in English using logic and reasoning. The online homework *may* also be supplemented with one or two hand written problems to be turned in during the lecture. This will be announced in the lecture and on the elms website. The following tentative homework guidelines will apply.

Approximately 10-20 problems will be posted at the website at least one week before the due date. Check the course syllabus and Elms announcements for the due dates. Work those problems to completion and submit the answers on the web. You will be informed immediately if your answer is correct or incorrect and will be allowed multiple attempts. All homework problems should be hand written out for your records. Late homework will not be accepted.

**Electronic homework submission:** To turn in your homework, you need to go to:

## http://www.masteringphysics.com/

The site is best accessed with a current version of Windows Explorer. If you run into problems check the system requirements. If you have not used Mastering Physics before then you should log on to the site and try the practice homework set before attempting any of the real homework sets.

In order to turn in your homework, you will need to register at the Mastering Physics website http://www.masteringphysics.com/. To register, you need two things - an access number and the class ID **MPPENNINGTON33943**. The access number should be packaged with new copies of the Knight textbook. If you want to buy a used book, make sure you purchase an access code at the Mastering Physics website.

**Laboratories:** See the P121 lab manual and the syllabus schedule describing the laboratory dates and grading.

**Discussions:** Recitations meet twice a week for the purpose of discussing homework problems, reviewing important concepts from the lectures, and administering quizzes. Typically there will be a quiz based on a specific textbook chapter as specified in the syllabus schedule. The quiz will emphasize hand written solutions and explanations of physical concepts.

**Clicker In-Class Questions:** You are required to obtain and register an electronic clicker and bring it to each lecture class. I will post instructions for the clicker usage on Elms.

**Help:** Help in understanding the concepts and solving problems can be obtained in a variety of ways. If you have a question or any difficulty, take advantage of all the available resources. These include:

- 1. Discussions with me before or after class, or in my office
- 2. Your recitation section, which is designed for just this activity
- 3. The Slawsky Clinic.

**Bulletin Board and Email:** Please check Blackboard every class day, to log in go to **www.elms.umd.edu**. I will communicate important information there or post solutions. I will also use email extensively. When sending an email please begin subject line with "PHYS121:"

**Grade:** Your grade will be based on the following components:

Three Midterm Exams (9% each)	27%
Final Exam	20%
Homework	16%
Quizzes	7%
Clicker Questions	5%

Laboratories 25% (if all labs completed, F otherwise)

All grades are subject to "curving" and there is no set correspondence between numbers and letters. **In general, a letter grade is only associated with the final course grade**, but I can provide you an estimate of how I think you are doing, if requested.

## Preliminary schedule (as of May 15, 2012)

	Tu 5/29	W 5/30	Th 5/31	F 6/1
	Lec: CH 1	Lec: CH 2	Lec: CH 2,3	Lec: CH 3
	Lab 2	Dis: <u>Quiz1</u> CH1	Lab 4	
			HW Intro to MP due 11pm	HW1 due 11pm
M 6/4	Tu 6/5	W 6/6	Th 6/7	F 6/8
Lec: CH4	Lec: CH 4,5	Lec: CH 5	Lec: <b>Exam I CH 1,2,3</b>	Lec: CH 5,6
Dis: <u>Quiz2</u> CH2	Lab 3	Dis: Quiz3 CH3		
HW2 due 11pm			Lab 5	HW3 due 11pm
M 6/11	Tu 6/12	W 6/13	Th 6/14	F 6/15
Lec: CH 6	Lec: CH 6	Lec: CH 7	Lec: CH 7	Lec: CH 8
Dis: <u>Quiz4</u> CH4	Make-up Lab	Dis: Quiz5 CH5	Lab 7	
HW4 due 11pm				HW5 due 11pm
M 6/18	Tu 6/19	W 6/20	Th 6/21	F 6/22
Lec: CH 8	Lec: <b>Exam II CH 4,5,6,7</b>	Lec: CH 9	Lec: CH 9	Lec: CH 10
Dis: <u>Ouiz6</u> CH6		Dis: <u>Quiz7</u> CH7	Lab 6	
HW6 due 11pm	Lab 8			HW7 due 11pm
M 6/25	Tu 6/26	W 6/27	Th 6/28	F 6/29
Lec: CH 10	Lec: CH 9	Lec: CH 11	Lec: CH 12	Lec: CH 12
Dis: Quiz8 CH8	Lab 9	Dis: Quiz9 CH9	Lab 10	
HW8 due 11pm			HW9 due 11pm	
M 7/2	Tu 7/3	W 7/4	Th 7/5	F 7/6
Lec: CH 13	Lec: Exam III CH 8,9,10,11	No Classes	Lec: Review	Lec: Final Exam CH 1-13
Dis: <u>Quiz10</u> CH8			No Lab	<u> </u>
HW10 due 11pm	Make-up Lab			
	HW11 due 11pm			