

## Physics for Scientists and Engineers II

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Course:	4 June – 1 August, M W F 8.00 – 9.50 a.m., WEB L104. Each student must also be registered in a discussion section (T H 8.00 – 9.30 a.m.)
Instructor:	Dr Christopher Stone, Associate Professor (Lecturer)
Office:	124 JFB, 801 – 585 – 9850
Office Hours:	M W F 10.00 – 11.00 a.m., or by appointment. Also, you may leave a message in my mailbox, 201 JFB (581 – 6901), or use e-mail: <a href="mailto:cstone@physics.utah.edu">cstone@physics.utah.edu</a>
Secretary:	Mary Ann Woolf, 205 JFB, 801-581-4246 (also fax #), <a href="mailto:woolf@physics.utah.edu">woolf@physics.utah.edu</a>
Course Web Page:	<a href="http://www.physics.utah.edu/~woolf/2220_stone.html">www.physics.utah.edu/~woolf/2220_stone.html</a>
Course Marshal:	Rob Roundy, <a href="mailto:rroundy@physics.utah.edu">rroundy@physics.utah.edu</a> (consult him if you have any difficulties using WebAssign)

### Textbook

*Physics for Scientists and Engineers (with Modern Physics): A Strategic Approach*, 2nd edition by Knight. Homework will be from the book but handled through WebAssign. The actual assignments are accessed individually by each student when they enter the WebAssign website, <https://www.webassign.net/utah/login.html>, at a cost of \$25.95 for the semester. Students are responsible for their own WebAssign access on-line. Payment can be made with credit card purchase or using a checking account that is linked to a Paypal account. This is explained when you first log into WebAssign.

### Course Description

The course covers most of Chapters 26 - 35, 22, 23, and section 24.1 of the textbook, some sections in more detail than others. The lectures will follow the book fairly closely, but supplemental information may also be discussed in class, and you will be held responsible for it as well as for textbook material on the exams. Therefore, regular class attendance and participation are strongly encouraged.

### Discussion Sections

2220-002	LCB 215	Yuan Fang	<a href="mailto:yuanfang2007@gmail.com">yuanfang2007@gmail.com</a>
2220-003	JTB 110	Chris Winterowd	<a href="mailto:forzajuve213@gmail.com">forzajuve213@gmail.com</a>
2220-004	LCB 121	Justin Findlay	<a href="mailto:jfindlay@gmail.com">jfindlay@gmail.com</a>

### Homework

For this course we use a web-based homework system provided by WebAssign. To log on to WebAssign, use the same log-in and password you use for the Campus Information System (CIS). You will complete all homework assignments over the web and get immediate feedback (scoring). For most problems you will be given up to five opportunities to enter the correct answer.

Typically, there will be two WebAssign homework sets due each week (see schedule). Each homework set must be submitted electronically by noon the day after its nominal due date (e.g., a Tuesday homework set is due by noon on Wednesday; a Thursday homework set is due by noon on Friday). If you wish, you may work together on homework. You may find that you learn more by discussing concepts and collaborating with other students than you would by simply working alone. When submitting your answers, remember that the numbers given in red on a homework problem are randomized by person, so do not submit the same answer as your friend. Solutions are available for each problem after the due date time has passed. For help with WebAssign contact Rob Roundy, the course marshal, [rroundy@physics.utah.edu](mailto:rroundy@physics.utah.edu).

To get the most you can from this course, study the textbook and your lecture notes carefully, and participate actively in your discussion section. If the material does not seem to make sense to you, talk to one of the TAs (Chris, Justin or Yuan) or to me. We shall be glad to help you. Please seek assistance as soon as you have a significant problem, so as not to fall behind in a subject that is unavoidably cumulative in nature. I urge you to read the relevant sections of your textbook at least once *before* we get to them in the lectures (and again afterwards), as we shall not have enough time to discuss in class all the textbook material that is relevant to the course. Also, feel free to ask questions or raise points of concern during the lectures. That way we can use the class time as efficiently as possible by concentrating on those parts of the subject that you find most difficult.

### **Examinations and Grading**

There will be three examinations during the semester, in addition to a final exam.

Exam 1        Friday, 22 June, 2:00 – 4:00 p.m. in WEB L104  
Exam 2        Friday, 6 July, 2:00 – 4:00 p.m. in WEB L104  
Exam 3        Friday, 20 July, 8:00 – 10:00 p.m. in WEB L104

Final Exam    Thursday, 2 August, 8:00 – 10:00 a.m. in WEB L104

The examinations will test you on the material in the textbook and the homework problems, and also that discussed in class. You may use one standard sheet of paper (both sides) with notes and formulas during each exam. The lowest one of your first three exam scores will be dropped when computing your total marks for the course. Your two lowest homework scores will also be dropped. The final exam (for which you may use *four* note sheets) is on Thursday 4 August and will be comprehensive but weighted towards chapters 22-24.1, which will not have been covered on the previous three exams. The total for the term will consist of 25 per cent for homework, 45 per cent for the sum of best two of the first three exams, and 30 per cent for the final exam. The grading scale for the course will be approximately as follows:

A	93	A–	90	B+	87	B	81
B–	78	C+	74	C	68	C–	64
D+	60	D	54	D–	50	E	below 50

### **An Additional Resource**

Dr Williams's 2220 web page for Fall 2010 has many useful past exam problems and solutions:  
[http://www.physics.utah.edu/~woolf/2220\\_gaw.html](http://www.physics.utah.edu/~woolf/2220_gaw.html) .

### **Final Exams**

Beginning Wednesday, 8 August, you may pick up your Final Exam from my secretary, Mary Ann Woolf (205 JFB, 801-581-4246). Be prepared to show some form of picture identification.

### **Honesty**

Cheating of any kind on an exam is a very serious violation of University rules and is unethical. Students caught cheating will receive a failing grade for the course and will be sent on to the University Disciplinary Committee for further action. All teaching assistants, including the course marshal, are to be considered proxies for Professor Stone when you are dealing with them regarding this course. They are to be listened to and treated with respect at all times.

## **Important Dates**

Adding and Dropping: Miscellaneous Courses (classes with irregular start and end dates): You may drop (delete) workshops, miscellaneous courses, and short term courses without tuition penalty according to the following schedule:

Classes 11+ days in length: Through the third day of class  
Tuition payment due Wednesday, May 29

NOTE: It is now university policy that your courses will be irrevocably DROPPED if tuition is not paid on time!

## **Holidays**

Wednesday, 4 July, Independence Day  
Tuesday, 24 July, Pioneer Day

## **Students with Disabilities**

The University of Utah and the Department of Physics and Astronomy seek to provide equal access to their programs, services, and activities for people with disabilities. If you are going to need accommodations in this course, reasonable prior notice must be given to the instructor and to the Center for Disability Services, 162 Olpin Union Bldg, 581-5020 (V/TDD) in order to make the required arrangements. You are strongly encouraged to talk to the instructor about your disability and any necessary accommodations within the first two weeks of the term.