

## Introductory Physics II (029:82) Spring 2012

**Instructor:** John Prineas, Associate Professor

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**Office hours:** Official: We Th 2:00-3:30 pm (or by appointment)

**Department:** Department of Physics and Astronomy

Department Office is in 203 Van Allen

Department Executive Officer is Professor Mary Hall Reno, available for appointment via Heather Mineart, 203 Van Allen, 335-1688

**Course location & times:** LR2 Van Allen, MWF 11:30-12:20 pm

**Course website:** [icon.uiowa.edu](http://icon.uiowa.edu)

**Course description:** This course, is a continuation of 029:81 (Introductory Physics I). The emphasis of the course will be on learning the physics of electricity, magnetism, and light, and improving your ability to think critically and solve problems. Grades are determined by three in-class exams, a final exam, homework, class participation, and performance in lab sessions. The class lecture is conducted by the professor. The lab sections are directed by a TA. Students are expected to spend 2 hours preparing outside of class for each hour of class credit per week. This course satisfies Gen Ed in Natural Sciences.

**Registration** Any registration changes (adding, dropping, changing sections) must be done in 203 VAN. If you are taking this course as a second grade option, your instructor needs to be notified.

**Prerequisites:** 029:81 Introductory Physics I

**Required Texts:** Fundamentals of Physics, Vol. 2, 9<sup>th</sup> edition, Halliday, Resnick, and Walker (John Wiley and Sons, 2011) with WileyPlus. Sold at: University Book Store, Iowa Book. Experiments in Electricity (lab manual). You are also required to have clickers, or "turning technology."

**Homework:** You will be assigned weekly homework on Fridays which is due the following Friday. Homework solutions for all assigned problems will be available on the course webpage via ICON. Your worst homework score will be dropped.

You will do your online homework using a program called WileyPlus. You will register and log in to WileyPlus at the website: <http://edugen.wileyplus.com/edugen/class/cls254120/> . Your personal passcode is provided in your new textbook. A tutorial on registering can be found at: <http://www.wiley.com/college/twomin/stu/register.html> . Do not forget to "review and submit" your homeworks after answering the questions.

As in most physics courses, problems are important in Introductory Physics II. They critical for you to develop an understanding of the basic physics being covered, besides giving you experience with problem solving strategies.

Try to start a problem set early. If you experience difficulty, talk to your classmates, or come and see me for some help (Not only is it my job to help you, I really do enjoy it!). I encourage you to work with your classmates on problems. But before you go into a session with others or try to look up a problem solution online, be sure to spend some time wrestling with the problems on your own. You will learn more and improve your problem solving skills more that way.

**Tutorial help:** TA's are generally available to answer questions and discuss problems in room 54 VAN during the hours posted on the door. Another resource is the Engineering Tutoring Center located in 3124 SC.

**Exams:** Three midterm exams will be given, and one final exam. Exam solutions will be available via ICON. Exam dates: I: Feb. 22; II: March 28; III: April 25; Final: 7:30-9:30 am, May 8, Phillips Hall Room 100.

**Make-up exams:** A make-up exam may be allowed in exceptional circumstances such as illness, [mandatory religious obligations](#), certain University activities, or [unavoidable circumstances](#). Students participating in University activities are expected to provide a statement before the absence signed by a responsible official that specifies the dates and times the student will miss class. Authorized activities include participation in athletic teams, the marching band and pep band, debate teams, and other recognized University groups, as well as participation in University field trips, service with the National Guard, and jury duty. A UI absence form is available at the Registrar [student forms](#) link.

**Laboratory:** Labs will provide hands on experience with concepts covered in class. The labs will be held under the supervision of teaching assistants, who will also grade the laboratory reports. Your worst lab score, which may be a missed lab, will be dropped. Discuss the grading of your labs with your TA. Students are expected to spend 2 hours outside of class for each hour of laboratory credit per week.

**Class participation:** Class attendance and participation is an important mode of learning the course material, and may contribute to your course grade (see Grading, below). Participation will involve answering questions that I pose to the class with your clickers. Clickers can be purchased in the book store, and may be used again in any UIowa course requiring them. In order to get credit for using the clickers, you must register your clickers at:

<http://icon.uiowa.edu/support/int/tt/clickerid.php>.

Some common issues with clickers:

1. Students forget their clickers and want to make up points
2. Students don't come to class and want to make up points
3. Students lose their clickers
4. Students don't register their clickers or register the clicker incorrectly

Regarding # 1 and 2: No option exists to make up points. However, your point totals from your two worst weeks will be dropped. Regarding #3: you will have to buy a new clicker, and re-register it. Regarding #4: You can check on the course ICON site to make sure you are receiving clicker scores. If you are, you registered correctly; if not, you haven't. If you register incorrectly, it is your responsibility to get this connected, and there will be no option for make up for the week(s) it was incorrectly registered. One other note regarding the use of used clickers: If you buy a used clicker, it is important that you peel off the bookstore sticker, as it will cover up the clicker number. If you register the clicker under the number printed on the sticker, the website above will allow it, but obviously your name won't be associated with their true clicker number on your roster.

**Grading:** Weighting of the different components of the course are as follows: Exam 1: 17.5% Exam 2: 17.5% Exam 3: 17.5% Final: 17.5% Homework: 15% Lab:15%. Your worst exam grade will be replaced by your class participation grade if your class participation grade is better than your worst exam grade. You can check your scores on exams on the course webpage via ICON, and your scores on homework on the WileyPlus class website. Grading for the course will approximately follow [College of Liberal Arts grading guidelines](#). Pluses and minuses will be used in this course.

### **Administrative Home**

The College of Liberal Arts and Sciences is the administrative home of this course and governs matters such as the add/drop deadlines, the second-grade-only option, and other related issues. Different colleges may have different policies. Questions may be addressed to 120 Schaeffer Hall, or see the CLAS [Academic Policies Handbook](#).

### **Electronic Communication**

University policy specifies that students are responsible for all official correspondences sent to their University of Iowa e-mail address (@uiowa.edu). Faculty and students should use this account for correspondences. (*Operations Manual*, III.15.2. Scroll down to k.11.)

### **Accommodations for Disabilities**

A student seeking academic accommodations should first register with Student Disability Services and then meet privately with the course instructor to make particular arrangements. See [www.uiowa.edu/~sds/](http://www.uiowa.edu/~sds/) for more information.

### **Academic Honesty**

All CLAS students have, in essence, agreed to the College's [Code of Academic Honesty](#): "I pledge to do my own academic work and to excel to the best of my abilities, upholding the [IOWA Challenge](#). I promise not to lie about my academic work, to cheat, or to steal the words or ideas of others; nor will I help fellow students to violate the Code of Academic Honesty." Any student committing academic misconduct is reported to the College and placed on disciplinary probation or may be suspended or expelled (CLAS [Academic Policies Handbook](#)).

### **CLAS Final Examination Policies**

The date and time of every final examination is announced during the fifth week of the semester; each CLAS student will receive an email from the Registrar stating the dates and times of the student's final exams. Final exams are offered only during the official final examination period. **No exams of any kind are allowed during the last week of classes.** All students should plan on being at the UI through the final examination period.

### **Making a Suggestion or a Complaint**

Students with a suggestion or complaint should first visit with the instructor (and the course supervisor), and then with the departmental DEO. Complaints must be made within six months of the incident (CLAS [Academic Policies Handbook](#)).

### **Understanding Sexual Harassment**

Sexual harassment subverts the mission of the University and threatens the well-being of students, faculty, and staff. All members of the UI community have a responsibility to uphold this mission and to contribute to a safe environment that enhances learning. Incidents of sexual harassment should be reported immediately. See the UI [Comprehensive Guide on Sexual Harassment](#) for assistance, definitions, and the full University policy.

### **Reacting Safely to Severe Weather**

In severe weather, class members should seek appropriate shelter immediately, leaving the classroom if necessary. The class will continue if possible when the event is over. For more information on Hawk Alert and the siren warning system, visit the Public Safety [web site](#).

**Tentative class schedule:**

<b>Date</b>	<b>Chapter</b>	<b>Lab</b>
Jan. 18	Chapt. 21	No lab
Jan. 23	Chapt. 22	Lab E1
Jan. 30	Chapt. 23	Lab E2
Feb. 6	Chapt. 24	Lab E3
Feb. 13	Chapt. 25	Lab E4
Feb. 20	Chapt. 26	No lab
Feb. 27	Chapt. 27	Lab E5
Mar 5	Chapt. 28	Lab E9
Mar 12	Spring break	
Mar 19	Chapt. 29	Lab E6
Mar 26	Chapt. 30	No lab
Apr 2	Chapt. 31	Lab OS1
Apr 9	Chapt. 32	Lab E11
Apr 16	Chapt. 33	Lab OP2
Apr 23	Chapt. 34	No lab
April 30	Chapt. 35	Lab OP3