



Physics 2102, General Physics for Technical Students, Spring 2007

Introduction to electricity, magnetism, and optics

Class website: www.phys.lsu.edu/classes/spring2007/phys2102

Prerequisites

- This is the second semester of general physics for technical students. In order to enroll in Physics 2102 you must have earned credit for Phys 2101 and Math 1552. If you do not meet this requirement you must receive explicit, written approval from the Chairman of the Physics Department in order to remain in this class. Some University Colleges or Departments require their students to earn a grade of "C" or better in Phys 2102.

Reminder: IMPORTANT CHANGES TO UNIVERSITY REGULATIONS:

- **New F Grade policy starting Spring 2007:** Beginning in the spring 2007 semester there will be a new policy in place regarding repeating courses in which students have previously earned two F's. In order for a student to repeat a course for a third time, after having earned two F's in the course, students must obtain special permission from their dean's office.
- **New W Grade policy starting Fall 2006:** This is a reminder to undergraduates that the new policy regarding the limit on the number of W grades undergraduates may receive went into effect in the fall 2006 semester. Based on the number of hours you have earned (not counting AP, advanced standing, or credit exams), you will be limited in the number of courses you may drop. You should also be able to determine via your PAWS account the number of W grades you are permitted. For more information and a list of FAQs see [http://appl003.lsu.edu/slas/registrar.nsf/\\$Content/W+Grade+Policy?OpenDocument](http://appl003.lsu.edu/slas/registrar.nsf/$Content/W+Grade+Policy?OpenDocument)

We encourage you, if you are not sure if you will succeed in this course, to strongly consider dropping the course by 11:59 PM on Tuesday Jan. 23. Also note that if this course is a co-requisite for another course, such as a lab, you may have to drop that course as well.

Required Textbook

The textbook we are using is the 7th edition of **Fundamentals of Physics**, (regular or extended edition) by Halliday, Resnick and Walker. Physics 2101 (*a pre-requisite for this course*) covered most of the first 20 chapters. This semester we will cover most of chapters 21 through 36. The book should be

stocked at the usual local bookstores, and is also widely available new and used at various bookstore websites. You are *not* required to buy any other books, even though the bookstore sometimes bundles them together on the shelves.

The problems at the end of each chapter are the source material for most of the WebAssign homework problems. **The checkpoints, sample problems, and end-of-chapter problems and questions are good places to spend exam study time.**

Lectures:

- We strongly encourage you to attend the lectures - you are responsible for knowing both the material presented in the text **and** in the lectures. In the schedule you can find the detailed sections which will be covered in each class. You should read the relevant material **before coming to class**. All lectures are held in 109 Nicholson.

Section	Days and times	Instructor	Office hours
1	M W F 8:40-9:30 AM	Dr. Iftikhar Ahmad 218B Nicholson, 578-0554 ahmad@phys.lsu.edu	MWF 11:30-12:30
2	M W F 10:40 AM-11:30 AM	Dr. Iftikhar Ahmad 218B Nicholson, 578-0554 ahmad@phys.lsu.edu	MWF 11:30-12:30
3	T Th 9:10 AM - 10:30 AM	Prof. Mette Gaarde 222C Nicholson, 578-0889 gaarde@phys.lsu.edu	M 12:30 pm - 2 pm Th 12:30 pm - 2 pm
4	T Th 12:10 PM - 1:30 PM	Prof. Jonathan Dowling 453 Nicholson, 578-0887 jdowling@phys.lsu.edu	MWF 2:30 - 3:30 pm

Homework

- You need to use **WebAssign** to view and submit the homework assignments, at www.webassign.net. This is a commercial service. You can purchase a passcode that entitles you to service in the Union Bookstore or you can pay on the WebAssign web site with a credit card.
- Please attend the first day of class to learn your username and password from your instructor. If you miss this class meeting, you are responsible for contacting your instructor to get this information before the first assignment comes due.
- Although each assignment has to be submitted by the date and time indicated, you can print out and carefully work the problems before logging back in to submit the answers. You are allowed **4 tries** to get the answers right, with no lasting penalties for incorrect answers in the first three submissions.
- Homework will usually be due at **2 AM Tuesday morning**.

- We will post the homework solutions shortly after they become due.

Quizzes

- We will have in-class quizzes several times per week, based on recent concepts or homework assignments in most classes. The quizzes are meant to help you understand the concepts on the course and you will be allowed to work together on their solution.

Exams

- There are three hour-long **exams**, from 6-7 PM (sharp) on Thursday nights, **February 8, March 8, and April 12**. Please bring your student ID cards to the exam.
- There will be review sessions on the Wednesday nights before the exams, **February 7, March 7, and April 11**.
- We will provide a **formula sheet** with each exam. They will be posted here when available.
- Other than a formula sheet, you may use a calculator, a ruler and/or protractor, and pens etc. No communication devices (cell phones, pagers etc) may be in your possession during an exam. Possession of such devices will be construed as intent to violate the Code of Student Conduct provisions on academic dishonesty.
- Our **Final Exam is on Thursday, May 10, 3:00 PM - 5:00 PM**.
- If you have a conflict between one of our group exams and **another LSU course meeting**, you should contact your instructor at least a week before the affected exam to make other arrangements.
- If you have special requirements for taking exams (or other course-related activities), please follow the procedures with the [Office of Disability Services](#), 112 Johnston Hall, and bring documentation from that office to your instructor a week before the affected activity.
- If you have a conflict between our final exam and a final exam in another LSU course, please contact **your dean** several weeks before the exam, and then bring his or her decision to your instructor.

Grading

All exams will be hand graded by the 2102 instructors. Grades are assigned by your section instructor. Your numerical grade will be based on the following formula:

Exam 1, Exam 2, Exam 3: 100 points each.
 Final Exam: 200 points.
 Webassign homework (combined): 50 points
 In-class quizzes: 50 points.
 Total – 600 points.

Your final numerical grade average, NA, is 1/6 of the total of the above, and your letter grade will be at least the following:

A: $NA > 88$ B: $88 > NA > 76$ C: $76 > NA > 60$ D: $60 > NA > 50$ F: $50 > NA$

The lowest homework assignment will be dropped when calculating your grade. Your in-class quiz score will be divided by 0.9 (so you can get more than 50 points for your quiz grade). **Excuses and**

deadline extensions will not be accepted, as we plan to make solutions available shortly after each assignment is due.

Finding help

- This is a hard course, and there is a lot of material to cover in a limited time. To do well in the course, we advise that you plan to spend ~10 hours/week on a regular basis during the semester (roughly, 3 hours outside class for each hour in class is a rule of thumb for all courses). It is not easy to catch up if you fall behind, time is used more efficiently if you keep up with the material, and leave the time before the exam for review, rather than learning. Learn to recognize your weak points early, so you can work on them before the exams!
 - Although every individual is different, we advise you find a study group, and make sure you are able to explain the problems to your classmates: you only know that you have learned when you can teach!
 - You should take advantage of the office hours provided by the instructor of the course; you can also go to office hours of a different instructor than your own, if it fits your schedule better.
 - LSU hires graduate students and advanced undergrads to provide **tutoring at a help desk**. These tutors cannot give you the answers to your homework, but should be able to point you in the right direction and clarify the material. The times and tutor names are posted on the door of **Nicholson 102**. Once the department has updated its pages for the semester, you can also find the information at <http://www.phys.lsu.edu/dept/academics/tutor.html>.
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