

PHYS 152 - 02 INTERMEDIATE PHYSICS II
Spring 2008

Instructor: Dr. C. Gerousis
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Office Hours: I will be available in my office for help during the hours shown below.

M: 11:00 am – 12:00 pm
R: 11:00 am – 12:00 pm
F: 11:00 am – 12:00 pm
and by appointment only.

Web: <http://www.pcs.cnu.edu/~gerousis>

Text: *Physics*, James S. Walker, Prentice Hall, 3rd Edition.

Goals

Primary goals of the course include:

- To learn the fundamental principles and theories of wave mechanics, optics, electromagnetism, and modern physics.
- To apply these fundamental principles and theories to solve problems.
- To gain a broad understanding and appreciation of the intellectual activity that characterizes the history of physics.

Students are responsible for their own learning, through reading and studying the text, reviewing the lectures, and working out homework problems. I strongly advise also that you read the upcoming material before it appears in lecture; the material will make much more sense that way.

Exams

There will be 2 exams during the semester and a final exam at the end of the semester. The final exam will be cumulative and will be given during the scheduled final period. All exams will be closed book and closed notes although you will be given a formula sheet.

Warning – Any indication that the work on an exam is not entirely your own will result in a failing grade for that work.

Homework

You are required to have a *WebAssign* account for this class. An access card good for one class and one semester can be purchased at the bookstore for a few dollars. Once I receive the roster, I will be creating *WebAssign* accounts for you, which will be distributed in class. If you miss class, *you must come see me in the first week of the semester.*

The ability to solve and analyze problems is one of the most important skills that you will develop in this course. Discussing the homework problems with fellow students can sharpen your problem-solving skills, so feel free to work in groups.

Additional comments about homework:

- Since we move at a fast pace during the semester, you will need to pay particular attention to keeping current on the assignments.
- Cooperative group study on the homework is encouraged, but simply copying someone else's work is unethical and will leave you unprepared for exams. Much insight can be gained by studying with one or more groups.
- Usually the biggest contributor to excessive time spent on homework is failure to read the text material and/or lecture notes for understanding prior to attempting problems. The text is thorough and well written; take advantage of it!

Grading

Your numerical semester grade will consist of:

<i>WebAssign</i> Homework	25%
Semester Exams	40%
Final Exam	35%

I recognize that Physics can be difficult for some students. Hence, I am willing to help you as much as necessary to ensure your success in this class. I may notify the Academic Advising Center if you seem to be having problems in this course. If I do so, someone will be contacting you to determine what help you need to succeed.

Attendance

Class attendance is mandatory to ensure your success in this class. I will take attendance periodically at the beginning of the class period. By the end of the semester, if you have accumulated more than three absences, your final grade in the class may be reduced.

Class Conduct:

Please arrive to class on time and turn off cell phones and beepers. Chatter during class will not be tolerated; it *only* disturbs the entire class including myself. Treat others in the class with respect. Please feel free to ask questions.

Schedule

The following schedule is fairly accurate. I will stay as close to it as possible, but I reserve the right to change it as necessary.

Class Meeting	Chapter – Topic(s)	Homework Due Date
1/22, 24	19 – Electric Charges, Forces & Fields	-
1/29, 31	20 – Electric Potential & Energy	2/1
2/5, 7	21 – Electric Current & Direct Current Circuits	2/8
2/12, 14	21 – Electric Current & Direct Current Circuits	2/15
2/19, 21	Exam 1-Tuesday 2/19 - Ch. 19, 20, and part of 21 22 – Magnetism	-
2/26, 28	22 – Magnetism	2/29
3/4, 6	23 – Faraday's Law	3/7
-	Spring Recess 3/10-14	-
3/18, 20	25 – Electromagnetic Waves	3/21
3/25, 27	26 – Geometric Optics 3/21 Last Day to Withdraw	3/28
4/1, 3	Exam 2-Tuesday 4/1 - Ch. 21, 22, 23, & 25 27 – Optical Instruments	-
4/8, 10	28 – Physical Optics: Interference and Diffraction 29 – Relativity	4/11
4/15, 17	29 – Relativity 30 – Quantum Physics	4/18
4/22, 24	31 – Atomic Physics 32 – Nuclear Physics	4/25
4/29, 5/1	32 – Nuclear Physics Review	5/2
5/8	Final Exam 5/8 @ 2:00 – 4:30 pm	

Academic Integrity

The students and faculty of Christopher Newport University have instituted a strict honor code:

On my honor, I will maintain the highest possible standards of honesty, integrity and personal responsibility. That means I will not lie, cheat, or steal and as a member of this academic community, I am committed to creating an environment of respect and mutual trust.

This class will be run under the aegis of this honor code. This means that, as a student, you are expected to abide by this policy. Specifically, this means that you agree not to cheat in this class. Academic integrity means that you will be honest and you will treat your classmates and instructors with respect.

It also means that you follow the restrictions laid out for the completion of your work. These restrictions are not given as obstacles to your learning but as support to enhance the effectiveness of problem solving. You might be able to find the answers to most of the physics problems by conducting a search in the library or on the web but you will not learn anything that way. To ensure success in this class, you need to attend lectures, ask questions, and do the homework.

Disability Accommodation

If you have a disability, you should make an appointment to see me to discuss your needs. In order to receive an accommodation, your disability must be on record in Disability Services located in the Academic Advising Center, Room 125, Administration Building, (594-8763).