

Physics 252 University Physics II, Spring 2012
MWF 10:30-11:20 AM, Th 5:00-5:50 PM
Eiben Hall Room 202

- Instructor: Eric Dodson Office: Wesselkamper 110
Phone: 739-8363 email: eric.dodson@chaminade.edu
- Office hours: Tu, Th 10:30-11:30 AM and by appointment
- Text : Physics for Engineering and Science, (2nd edition), Michael Browne; Chapters 20-28, 30-34
- Prerequisites: Physics 251
- Content: Course provides a calculus-based introduction to electricity and magnetism, circuits, waves, interference, optics, special relativity and selected topics in modern physics
- Grading: The course will be graded on a curve with the following breakdown
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|---------------------------|-----|
| Homework, Attendance, | |
| Participation and Quizzes | 15% |
| Midterms(3) | 60% |
| Final Exam | 25% |
- Website: TBA
- Homework: Homework will be assigned from the text or via the class website. I encourage you to work together on homework, but you must turn in your own work. The main purpose of the homework is to help you understand the material and serve as practice for the midterms.
- Midterms: Three midterms will be given. Our midterms will consist of twenty multiple choice problems worth three points apiece and two twenty point problems that will be graded for partial credit. The midterms will be closed book, closed notes. A formula sheet will be provided.
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| Midterm I | Friday, February 10 |
| Midterm II | Friday, March 9 |
| Midterm III | Monday, April 13 |
- Final Exam: Date and Time: TBA
The final exam will be comprehensive
- Helpful advice: Come to class every day. Read the assigned sections from the textbook before class. Ask questions. Get an early start on the homework and come get help if you get stuck. Try to work the homework problems using only the formula sheet. Stay on top of the material (Don't cram). If you are having difficulty come see me ASAP
Physics is not a spectator sport, the only way to get better is to practice.

The table below shows the proposed schedule of the material to be covered and the associated chapters from the textbook

Week	Topic(s)	Chapter(s)
1	Charges, Electric Force	20
2	Electric Fields	20
3	Gauss's Law, Electric Potential Energy	21, 22
4	Electric Potential, Work and Energy, Midterm 1	22
5	Electric Potentials and Fields, Capacitors	22, 23
6	Current, Circuits	24
7	RC Circuits, Magnetic Fields	24, 25, 26
8	Magnetic Forces, Midterm 2	26, 27
9	Induction	28
10	Waves, Sound	16
11	Waves, Electromagnetic Fields, Electromagnetic Spectrum	30
12	Geometrical Optics, Midterm 3	31
13	Interference and Diffraction	32, 33
14	Special Relativity	34
15	Selected Topics in Modern Physics	35-37