

Physics 201 - Section 04

Introduction to Electricity and Magnetism Fall Semester 2014

- Room/Time:* Seaver Hall 101 – TR 1:35 - 2:50 pm (lectures)
Seaver Hall 117/119 – M 3:00 - 4:50 pm (lab sections)
- Instructor:* Dr. Gabriele Varieschi
Office: Seaver Hall - 110
Phone: (310) 338-7632
E-mail: gvarieschi@lmu.edu
Office hours: MW 10:00-11:30 am, and by appointment.
Web page: <http://myweb.lmu.edu/gvarieschi/physics.html>
- Text:* Serway & Jewett – Physics for Scientists and Engineers, Vol. 2 (or two volumes together) - Brooks/Cole/Cengage – recommended edition: **8th edition** (other editions can also be used, but homework assignments will be based on 8th edition).
- Objectives and Topics:* From Chapter 23 to Chapter 31 (tentatively). Electrostatics. Current, resistance and D.C. circuits. Magnetism. Induced electromotive force. Electric and magnetic properties of matter. Maxwell's equations. Laboratory experiments pertaining to electricity and magnetism. Calculus based course for engineers and scientists. Prerequisites: Physics 101- Introduction to Mechanics, Math 132 – Calculus II (or concurrent enrollment).
- Learning Outcomes:* Understand the phenomenology of electricity and magnetism. Understand the concept of a classical field: electric and magnetic. Be able to solve problems involving DC circuits of increasing complexity and other e.m. problems. Understand the theoretical framework provided by Maxwell's equations. Understand the practical applications of Maxwell's equations. This course serves as a prerequisite for PHYS 301.
- Tests:* There will be four tests during the semester. Your lower test grade will be dropped, so only your three best tests are counted toward the final grade. There will be **no make-up tests** given; if you miss any one of the four tests, that one will automatically be your dropped test. Tests are closed-book, but you may bring in a sheet of equations.
- Test Dates:* TBA
- Final Exam:* **Thursday, Dec. 11, 11am-1pm.**
The final exam is cumulative and is equivalent to 2 tests.
- Homework:* Weekly homework will be assigned and graded (in part – one or two problems per assignment). Solutions will be discussed in class and posted online. Homework assignments are due at the beginning of the lecture, on the due date. Late homework will receive partial credit.
- Laboratory:* The laboratory is an integral part of this course. The experiments will complement the topics of the lectures. The laboratory will count for 15% of your

final grade. Missing 2 or more lab sessions will result in a failing grade for the course. See lab schedule for detailed information.

DOWNLOAD LAB MATERIALS AT:

<http://myweb.lmu.edu/gvarieschi/physics.html>

<i>Grading:</i>	Laboratory	15 %	
	Homework	10 %	
	Test 1	15 %]
	Test 2	15 %]
	Test 3	15 %]
	Final Exam	30 %	

Three best tests
out of four (see above)

Test Grading (approx.): <50%=F; 50-54%=D; 55-69%=C range; 70-84=B range; >84=A range.

Academic Honesty: Academic dishonesty will be treated as an extremely serious matter, with serious consequences that can range from receiving no credit for assignments/tests to expulsion. It is never permissible to turn in any work that has been copied from another student or copied from a source without properly acknowledging the source. It is your responsibility to make sure that your work meets the standard of academic honesty set forth in the "LMU Honor Code and Process" in the LMU University Bulletin.

Syllabus changes: If necessary, this syllabus and its contents are subject to revision; students are responsible for any changes or modifications announced in class.

Have a good semester. Good luck !