

Physics 201 - Section 02

Introduction to Electricity and Magnetism Fall Semester 2018

- Room/Time:* Seaver Hall 101 – **TR** 9:40 - 11:10 am (**lecture time 9:40 – 10:55am**)
Seaver Hall 119/121 – **T 2:40 - 4:10 pm** (lab sections)
- Instructor:* Dr. Gabriele Varieschi
Office: Seaver Hall - 110
Phone: (310) 338-7632
E-mail: gvarieschi@lmu.edu
Office hours: MW 2:00-3:00 pm, and by appointment.
Web page: <http://gvarieschi.lmu.build/physics.html>
- Textbook:* Ling, Moebs, and Sanny – University Physics, Vol 2 – Openstax
Free textbook available for download at:
<https://openstax.org/details/books/university-physics-volume-2>
- Objectives and Topics:* From Chapter 5 to Chapter 13. Electrostatics. Current, resistance and DC 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 **three tests** during the semester. **They will all count toward your final grade, so please try not to miss any of them.** There will be **no make-up tests** given. Tests are closed-book, but you may bring in a sheet of equations.
- Test Dates:* TBA
- Final Exam:* **Thursday, Dec. 13, 8am-10am.**
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://gvarieschi.lmu.build/physics.html>

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

Grading (approx.): 0-50%=F; 50-55%=D; 55-60%=C-; 60-65%=C; 65-70%=C+; 70-75%=B-; 75-80%=B; 80-85%=B+; 85-90%=A-; 90-100%=A.

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 (including Internet) 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” which appears in the *LMU Bulletin* (see <http://bulletin.lmu.edu/>)

Americans with Disabilities Act:

Students with special needs as addressed by the Americans with Disabilities Act who need reasonable modifications, special assistance, or accommodations in this course should promptly direct their request to the Disability Support Services Office. Any student who currently has a documented disability (physical, learning, or psychological) needing academic accommodations should contact the Disability Services Office (Daum Hall Room 224, 310-338-4535) as early in the semester as possible. All discussions will remain confidential. Please visit <http://academics.lmu.edu/dss/> for additional information.

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 nice semester. Good luck!