

Physics II (1240) Syllabus Spring 2026

Clifton Murray (Mr., Professor, Dr.), UNM-Valencia

Class meets T Th 5:00-6:15p.

Prerequisites: Physics I (1230) with grade of C or better, or Instructor permission.

Credit Hours: Three. Expect to spend at least six hours per week solving homework problems and studying for tests.

Recommended (but not required) concurrent course: Physics II Lab (152L) Tuesdays, Noon-2:45p

Instructor's Office times: In Person Wed 11a-2:15 p; Thurs 11:45a-12:15p, 2:00-2:45p, and by appointment.

wcmurray@unm.edu , 505-925-8727

Text: College Physics 8th ed. Vol II, (Electricity and Magnetism, Optics, and Modern Physics), by Wilson, Buffa, & Lou.
A scientific calculator (having trig and powers-of-ten functions) is required.

Student Learning Goals & Objectives: To be able to explain the concepts of, and solve problems involving: Electric fields, forces, and potential (voltage); d.c. and a.c. circuits, and therefore voltage, current, resistance, capacitance, inductance, and impedance; magnetism, including electromagnets as well as permanent magnets and transformers; electromagnetic induction; electromagnetic waves. Also, be able to explain the concepts of, and/or solve basic quantitative problems involving: Quantum, Atomic, and Nuclear physics, recent hypotheses and observations of elementary particles and the Universe, and selected results from Einstein's relativity theory.

Policies and Notices:

**After four accumulated absences, the student may be dropped by the instructor without further notice.*

***"Makeup" tests will be given only at the instructor's discretion—in other words, the instructor is free to **not** give a makeup. If a makeup is given, expect a *maximum score of 85%*, because of (i) the unfair advantage of a makeup over students who took the test on time, and (ii) the additional time and effort required of the instructor in preparing, scheduling, administering, and grading the makeup. For a planned absence, speak to the Professor to see if an early test might be arranged.*

**Late homework.* Credit may be reduced by 50% if one day late; minus 100% if two or more days late. Homework due dates are indicated on the schedule accompanying this syllabus. Extensions may be granted if late turn-in is due to covid-related circumstances.

**Persistent disruptive behavior,* such as loud talking, ridiculing or intimidating the instructor or other students, or other forms of distraction, will result in the offender being dismissed and dropped from the class.

** Accommodations:* UNM is committed to providing equitable access to learning opportunities for students with documented disabilities. As your instructor, it is my objective to facilitate an inclusive classroom setting, in which students have full access and opportunity to participate. To engage in a confidential conversation about the process for requesting reasonable accommodations for this class and/or program, please contact the [UNM-Valencia Equal Access Services](#) (Sarah Clawson, Coordinator), at (505) 925-8840 or by email at sjclawson@unm.edu. Or the UNM-Albuquerque Accessibility Resource Center (<https://arc.unm.edu/>) at arcsrvs@unm.edu or by phone at 505-277-3506.

** COVID-19 Health and Awareness.* UNM is a mask friendly, but not a mask required, community. If you are experiencing COVID-19 symptoms, please do not come to class. If you do need to stay home, please communicate with me at wcmurray@unm.edu ; I can work with you to provide alternatives for course participation and completion. Let me, an advisor, or another UNM staff member know that you need support so that we can connect you to the right resources. Please be aware that UNM will publish information on websites and email about any changes to our public health status and community response.

** Updated Spring 2025 Syllabus Language to substitute for "Title IX" language:*

UAP 2720 and 2740. Our classroom and university should always be spaces of mutual respect, kindness, and support, without fear of discrimination, harassment, or violence. If you ever need assistance or have concerns about incidents that violate this principle, please access campus support resources. These include confidential services at [LoboRESPECT Advocacy Center](#), [the Women's Resource Center](#), and the [LGBTQ Resource Center](#). The University of New Mexico prohibits discrimination on the basis of sex (including gender, sex stereotyping, gender expression, and gender identity). UNM faculty and graduate teaching assistants are considered "responsible employees." "Responsible employees" must [communicate reports](#) of sexual harassment, sexual misconduct and sexual violence to [Compliance, Ethics and Equal](#)

[Opportunity](#). For more information on the campus policy regarding sexual misconduct, reporting, and reporting for “responsible employees,” please see UAP 2720 and UAP 2740.

Homework Format* Make the **main prob #--**5, 11, 21**, ... (not a,b,c...) extra **BIG**. This is to help make the separation between main problems really obvious, so the instructor can find and check the main problems fast. Finally, most homework problems in physics pertain to a physical situation. For such problems, a simple **sketch** is required (It’s not pure math--it’s Physics.)

*A *Formula/Equation sheet* will be provided before each test. Only minor notations on the sheet are allowed. No example problems are permitted. The Instructor may inspect any formula sheet any time during tests; if example problems or excessive notes are found, they will be confiscated, and the test grade lowered at the Instructor’s discretion.

**Tutoring* is available, free. Go to The Learning Center, in the Library/Bookstore building here on Valencia Campus. They’ll be glad to find someone to work with you who has taken Physics.

Final Exam Minimum Grade* is **70% in order to receive above a “D” in the course, regardless of other test or homework scores.

Grading:	Maximum points
Homework	100
4 tests	400
Drop lowest one of tests or homework:	-100
Final exam (not dropped)	<u>150</u> (min 105 (70%) to receive higher than a “D”.)
	550 Max poss course total

(“x” = student’s total accumulated points)

$536 \leq x \leq 550$ A+ (unless a test is missed, or homework score is less than 50%)

$509 \leq x < 536$ A (unless a test is missed, or homework score is less than 50%)

$495 \leq x < 509$ A-

$481 \leq x < 495$ B+

$454 \leq x < 481$ B

$440 \leq x < 454$ B-

$426 \leq x < 440$ C+

$399 \leq x < 426$ C

$385 \leq x < 399$ C- *Note: a C- may not meet the prereq for some courses or requirements of some programs

$330 \leq x < 385$ D

$x < 330$ F

No “Incomplete” (I) grades will be given.