

calcPhysics I-1310 Syllabus Fall 2024

Meets T Th 10:30-11:45a Instructor: (Mr., Dr., Professor) Clifton Murray

UNM-Valencia

Professor's Help Hours: Remotely Wed Noon-4:00p wcmurray@unm.edu, In Person Thursdays 11:45a-12:15p, 1:15p -2:45p, and by appointment.

Office phone 505-925-8727

Pre- or Co-requisite: Math 1512 (Calculus I)

Credit Hours: Three. Expect to spend at least 6 hours of out-of-class work on homework and study.

Necessary Equipment:

-Text: Halliday & Resnick's Fundamentals of Physics Extended 10th ed., by Jearl Walker

-Calculator, Scientific (trig functions, log, powers of ten capable), An actual calculator, not a phone app (cell phones not allowed on tests.)

Course Learning Objectives: By the end of the course, the student should be able to correctly explain the concepts of, and solve problems involving, at least the following: 1) units of physical measure; 2) linear motion: position, velocity, and acceleration; 3) basic vector math; 4) force, types of forces, and the concept of net force; 5) Newton's 1st, 2nd, & 3rd laws of motion; 6) free-fall motion; 7) two-dimensional projectile motion; 8) mechanical energy: kinetic, gravitational potential, and elastic; 9) rotational motion; 10) translational and rotational equilibrium situations; 11) centripetal force and acceleration; 12) torque and its effect on rotation; 13) simple harmonic motion; 14) wave motion, 15) physics of sound.

Academic Dishonesty as defined in the UNM-VC catalog includes copying work from other students. Any student found doing this on tests is subject to disciplinary action, ranging from "a reduced or failing grade for the work in question and/or the course" to "dismissal from the University" <http://pathfinders.unm.edu/campus-policies/academic-dishonesty.html>

Disruptive Behavior is any behavior which interferes with other students' learning or the instructor's ability to guide that learning. Examples include loud talking/ laughing/chatting with your buddy which require repeated warnings from the instructor, or derisive/ridiculing comments toward well-meaning students or the instructor—this is a good way to get expelled from the class. Keep your motives constructive, and it'll be a good educational experience.

Title IX: The University of New Mexico and its faculty are committed to supporting our students and providing an environment that is free of bias, discrimination, and harassment. The University's programs and activities, including the classroom, should always provide a space of mutual respect, kindness, and support without fear of harassment, violence, or discrimination. Discrimination on the basis of sex includes discrimination on the basis of assigned sex at birth, sex characteristics, pregnancy and pregnancy related conditions, sexual orientation and gender identity. If you have encountered any form of discrimination on the basis of sex, including sexual harassment, sexual assault, stalking, domestic or dating violence, we encourage you to report this to the University. You can access the confidential resources available on campus at the LoboRESPECT Advocacy Center (<https://loborespect.unm.edu>), the Women's Resource Center (<https://women.unm.edu>), and the LGBTQ Resource Center (<https://lgbtqrc.unm.edu>). If you speak with an instructor (including a TA or a GA) regarding an incident connected to discrimination on the basis of sex, they must notify UNM's Title IX Coordinator that you shared an experience relating to Title IX, even if you ask the instructor not to disclose it. The Title IX Coordinator is available to assist you in understanding your options and in connecting you with all possible resources on and off campus. For more information on the campus policy regarding sexual misconduct and reporting, please see <https://policy.unm.edu/university-policies/2000/2740.html> and CEEO's website.

If you are pregnant or experiencing a pregnancy-related condition, you may contact UNM's Office of Compliance, Ethics, and Equal Opportunity at ceo@unm.edu. The CEEO staff will provide you with access to available resources and supportive measures and assist you in understanding your rights.

Accommodations: Should you have a disability requiring special accommodation, please bring the instructor appropriate documentation from Accessibility Services. You can do an online search for UNM-Valencia Accessibility Services, and/or email Sarah Clawson at sjclawson@unm.edu, and/or call 505-925-8540.

Homework: Due on Review Days, before class starts. Turn in by chapter; do not run chapters together; do not split chapters. Make the

Main problem #s **Big**—e.g. **5, 9, 23**. Separate problems that are on same sheet of paper with either whitespace or a bold separation line.

Homework late, in by next class day: -50%. Late more than next class day: -100%.

Attendance: Expected. After 4 accumulated absences, the student may be dropped from the course without notice. If you have a work or other unavoidable conflict, you should talk to the professor, to decide whether an alternative policy that allows you to miss more should apply, or whether you should drop and take the course at another time.

Makeup Work: Tests: There are no makeup tests, except in genuine emergencies—in such cases, expect a max score 80%. (Early tests, however, might be arranged without penalty.) If you skip a test, the highest grade you can receive for the course is an A-. Homework (again) 1 day late, -50%; 2 days late, -100%.

Grade weighting:

	Max possible points	
Homework	100	
4 tests	400	
Drop lowest test	-100	
Final exam (not dropped, comprehensive, min score 70% to receive > D)*	<u>150</u>	
	550	max poss course total
$536 \leq x \leq 550$	A+	(unless a test is missed, or homework score is less than 50%.)
$509 \leq x < 536$	A	(unless a test is missed)
$495 \leq x < 509$	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-*	
$330 \leq x < 385$	D	
$x < 330$	F	

*There may be courses and/or degree requirements which will not accept a C- as adequate for Physics 1310. For example, a C- does not qualify a student to enroll in Physics 1320

Finally, a positive note: *Tutoring* may be available in the Learning Commons (in Library bldg.), by students who have taken and done well in this course. tutor@unm.edu, or Shalaine Castillo, sbuck07@unm.edu.