PHYS 2A: General Physics I, CRN 02071 and 25051, Fall 2026

Welcome to PHYS 2A! This course is a first course in algebra-using physics for non-majors. We will be covering exciting topics ranging from Newtonian mechanics to wave phenomena. And you will get to see many of these topics come to life when you explore them by collaborating with your peers on hands-on lab experiments!

How to Contact your Instructor

- **Name:** Kolo Wamba, PhD
- **Email:** wambakolo@fhda.edu (you can also just use the Canvas Inbox)
    - **I will always do my best to respond to your messages within 24 hours.**
- **Canvas:** You can also "reply" to a Course Announcement or one of our discussions
    - **Use this method if it's something you want to be visible to the whole class**
- **Office Hours:**
    - Monday 5:30 pm - 6:30 pm in room S17
    - Thursday 10:30 am - 11:30 am in room MLC103

Watch out for Course Announcements, which I will be posting periodically. I encourage you to set up your Canvas preferences so that you receive a notification whenever there's an update.

Catalog Course Description

This course provides an elementary study of the basic physical laws describing the motion of bodies, as well as the study of oscillations, waves, and sound. Students will experience the applications of everyday physical phenomena in problem-solving using verbal logic, critical thinking, and mathematics. In the laboratory, students will explore experimental scientific procedures by comparing theoretical models to classic experiments using standard measurement techniques, basic uncertainty analysis, and graphical interpretations of data.

Diversity and Inclusion

Physics is for everybody, it works best when widely participated in, and I pledge to do my best to ensure that students from all backgrounds feel empowered and well-served by this class. I welcome student feedback and suggestions for how to best meet each of your particular learning needs. Moreover, I see diversity as strength, and I believe that diversity is assured

through inclusivity and by treating people equitably. One way that I strive to be inclusive in my teaching is to center the contributions to physics that came from minoritized individuals. Another is to model approaches to physics that are socially responsible. This means not only being respectful of all forms of diversity: of race, ethnicity, gender, sexuality, age, disability, socioeconomic status, culture, and so on, but also being ecologically sustainable. If any of our scheduled class activities, such as exams, conflict with any of your religious events, please let me know so that I can work out an accommodation for you.

Student Learning Outcomes (SLOs)

At the conclusion of this course, students will be able to:

1. Examine critically new, previously un-encountered problems, analyzing and evaluating their constituent parts, to construct and explain a logical solution utilizing, and based upon, the fundamental laws of mechanics.

2. Take precise and accurate scientific measurements, with their uncertainties, and then with calculations from them, analyze their meaning as relative, in an experimental context, to the verification and support of physics theories.

Overall Course Format

This course is fully in-person. It consists of approximately **4 total hours of weekly lectures** and **3 hours of weekly lab**. Regular in-person attendance is required for **both** the lecture and the lab components of the course.

Lecture Times: MTWR 9:30 am - 10:20 am

Lecture Location: MLC103, De Anza College campus

Lab Times:

- M 10:30 am - 1:20 pm (CRN 25051)
- W 10:30 am - 1:20 pm (CRN 02071)

Lab Location: S17, De Anza College campus

Lab Instructor

- Prof Tony LaTorre latorreanthony@deanza.edu

Required Materials for this Course

1. Course text: Paul Peter Urone, Roger Hinrichs, et al, "College Physics 2e"
2. Scientific calculator: Any regular (non-graphing) scientific calculator will do
3. A smartphone or other networked mobile device

Thinking of Dropping? Read this First

If you decide to drop this course altogether, don't just start "ghosting" me and your classmates--it is your sole responsibility to actually withdraw officially through the College Registrar. This can usually be done through MyPortal.

Overall Attendance Policy

I expect consistent and regular class and laboratory participation in this course. Note that attendance by itself is not graded in this course, but participation is. If you are enrolled in the course at the start of the quarter, you must attend class and/or lab at least once before the add/drop deadline or I might drop you from the course.

Lab Attendance Policy

Lab sessions must be attended in person to receive credit for lab participation. There are no make-up labs. Perfect lab attendance is not mandatory; you may miss up to **two** lab sessions with only a modest impact to your final grade. You may not miss a lab session more than twice. If you do, I will be forced to either drop you from the course or assign a failing grade.

Exams

There will be two Midterm Exams and a Final Exam.

The two midterms will respectively cover material from the first and second thirds of the quarter. The Final Exam is cumulative but will emphasize material that had not been covered on the midterms.

The format of each of the Midterm Exams will be a written test that you will come to class in person to take. The Final Exam will be given in person during Finals Week. The Midterm and Final exams will all be closed-book, but you are allowed to bring with you to the exam up to two 8.5x11 pages of handwritten formulas and notes.

Please note: There will be NO make-up exams except under seriously extenuating circumstances.

Grading

The graded assignments in this course are designed to provide you with an opportunity to demonstrate your learning. They are classified and graded according to the categories given the table. Each indicated assessment category is associated with a weight that determines its relative contribution to your final grade in the course.

Course component	Weight [%]
Open-book quizzes	10%
Reading tests	5%
Project	5%
Homework problem sets	5%
Thinking journals	5%
Lecture participation	5%
Midterm Exams	25%
Final Exam	25%
Lab	15%

Numerical % range	Letter grade
≥80%	A
60% to <80%	B

40% to <60%	C
20% to <40%	D
<20%	F

Academic Honesty and Integrity

Unless otherwise specified, it is required in this course that any work you submit for a grade is both original and has to have come from you. Willful and systematic failure to abide by this guideline is considered a violation of College policy and will be taken very seriously.

This being said, it is **not** a problem if students want to study together in small groups and collaborate with each other on homework assignments. This is actually the preferred method for learning physics, and students are strongly encouraged to use it.

Note about Generative AI

Generative AI is racist. There, I said it.

Communication, analytical, and critical thinking skills are important elements of this course, and developing competencies in these areas will help prepare you for future coursework and for life in a functioning democracy. Therefore, AI-generated submissions are not permitted and will be treated as academic dishonesty.

Even if we leave aside College policy, using generative AI is highly problematic for many reasons, and I believe that there is NO ethical or "responsible" use of generative AI. For starters, there is evidence that using these products actually makes it more difficult for students to learn and can even de-skill them. Second, these products use enormous amounts of energy and clean water, generate massive quantities of e-waste, and produce harmful pollution in the form of atmospheric carbon emissions. Third, these technologies need to be fed vast quantities of data to train them, and much of this data will necessarily consist of content that has either been taken without the original author's consent or, even worse, seized and used over the original author's explicit objections. Fourth, in order to train these models properly, the input data must first be painstakingly labeled by human annotators, and much of this effort is provided by highly exploited and abused workers in the Global South. Fifth, because generative AI models have been trained primarily on content that was produced in quarters historically steeped in racial, gender-based, ableist, classist, and cisheteronormative bias, the models have a notorious tendency to amplify those same types of biases and their associated harms. Sixth, because of the problem of so-called "hallucinations", these products' outputs can be extremely unreliable. Lastly, it must be pointed out that the main motivation behind the massive investment

in generative AI that exists in our society is to support systems of mass surveillance that will help the tech oligarchs consolidate and reinforce their absolute dominance over our society. Therefore, to promote and support generative AI is to indirectly promote and support fascism.

In submitting assignments, the student confirms that the work submitted is entirely their own work. As the instructor, I may follow up with a student on their submission of an assignment to verify authenticity, and I expect students to respond within at least two days in order to complete the assignment in a timely fashion.

Campus Resources

Disability Support Services (DSS)

Students requiring services or arrangements because of hearing, visual, or other disability should contact their instructor, counselor, or Disability Support Services as soon as possible to request reasonable accommodations. To schedule an online or phone appointment with a DSS counselor, complete this application form, or contact the DSS office staff at 408.864.8753 dss@deanza.edu

Tentative schedule [HP=Homework Problem set; RT=Reading Test; TJ=Thinking Journal]

Week	Dates	Topics	Chapters	Notes	Major assignments
1	9/21-24	Intro/Syllabus Physical quantities, units	1		TJ1; RT1
2	9/28-10/1	Motion in 1D	2		HP1; RT2
3	10/5-8	Motion in 2D	3		HP3; RT3; Quiz 1
4	10/12-15	Newton's laws	4		HP4; Quiz 2
5	10/19-22	Applications of Newton's laws	5	**Midterm #1 (10/22) : ch 1-4**	HP5; RT4; Quiz 3
6	10/26-29	UCM and gravitation	6		
7	11/2-5	Work and energy	7		Physics project proposal; RT5
8	11/9, 11/10,11/12	Linear momentum	8	**Veterans Day (11/11/26): No class, no lab**	HP6; RT5
9	11/16-20	Statics and torque	9	**Midterm #2 (11/20): ch 5-8**	HP7; RT6; Quiz 4
10	11/23-25	Angular momentum	10	**Thanksgiving (11/26/26): No class**	HP8; Quiz 5

11	11/30-12/3	Waves and oscillations	16		HP9; RT7
12	12/7-12/11	Sound	17		RT8
Finals Week	12/15	Final exam 9:15 am		**Final Exam: ch 1-8,9,10,16,17**	

Student Learning Outcome(s):

• Critically examine new, previously un-encountered problems, analyzing and evaluating their constituent parts, to construct and explain a logical solution utilizing, and based upon, the fundamental laws of mechanics.
• Gain confidence in taking precise and accurate scientific measurements, with their uncertainties, and then with calculations from them, analyze their meaning as relative, in an experimental context, to the verification and support of physics theories.

Office Hours:

5:30 PM - 6:30 PM	S17	M	
10:30 AM - 10:30 AM		MLC103	TH