

Course Syllabus

Welcome to **PHYS 2010 — General Physics I!** This is the first semester of an algebra-based introduction to physics primarily intended for students in the biological sciences.

Objectives

At the end of this course you will be able to **analyze** physical systems (accelerating cars, rotating centrifuges, etc.) using two paradigms: (1) Newton's laws, and (2) conservation laws. You will be able to **explain** the effects of forces qualitatively. You will be able to perform calculations resulting in **predictions** for physical systems.

Lectures

Lectures are Monday, Wednesday, and Friday from 3:00–3:50pm in Duane G1B30.

Labs

Each student is enrolled in a lab section. You must attend the section you are registered for. These lab sections meet once a week and are not optional! To determine which lab section you are in, you can look on Canvas or on MyCUInfo.

Instructors:

Professor Mihaly Horanyi (lectures)

Office: DUAN F927 (tower across from stadium)

Phone: (303)492-6903

E-mail: horanyi@colorado.edu

Help Room hours: Monday 4–5pm, Friday 2–3pm

The Help Room is in Duane G2B87.

Prof. Horanyi is also available to meet one-on-one by appointment.

Professor Kevin Stenson (lab sections)

Office: DUAN F317

Phone: (303)492-1106

E-mail: kevin.stenson@colorado.edu

Help Room hours: Tuesday and Thursday 4-5pm

Prof. Stenson is also available to meet one-on-one by appointment.

Materials

Required:

- An iClicker that is registered on myCUinfo
- Access to the online homework system *Sapling* (includes e-textbook)

You do *not* need to purchase a physical textbook for this class, since an e-text is included automatically in your online learning system. However, if you prefer to also have a hardcopy, the one we will be using is “College Physics” (2nd ed.) by Roger Freedman et al.

Grading

The following breakdown will be used to calculate your overall percentage.

Regular Exams (3):	$3 \times 10 = 30\%$
Final Exam:	20%
Lab:	15%
Written homework:	15%
Sapling:	20%
Clickers (extra credit):	3%

The grading scheme for this class will be approximately as follows:

100 – 90 A/A- 89 – 80 B+/B/B- 79 – 70 C+/C/C- 69 – 55 D+/D/D- 55 – 0 F

The exact cutoffs will be determined after the final exam. If there is any adjustment made to these values, it will only be in your favor.

Reading

Every lecture covers a portion of the eText on Sapling (*College Physics* by Freedman) as specified on the course calendar. You will learn more, and faster, if you try to read the textbook before coming to class.

Exams

There will be three regular exams during the term along with a comprehensive final exam. The exam schedule is given below. Additional information about the exam (including specific location) will be given during the weeks prior to the exams.

Exam 1:	Thursday, February 6	7:30pm in MUEN E050
Exam 2:	Thursday, March 5	7:30pm in MUEN E050
Exam 3:	Thursday, April 9	7:30pm in MUEN E050
Final Exam:	Monday, May 4	7:30pm–10:00pm; location to be determined

All exams will be multiple choice with no partial credit. Calculators and one sheet (front and back) of handwritten notes are allowed, but cell phones and textbooks are not. If you have an emergency that makes it impossible for you to take an exam during the scheduled exam period, please contact us *as early as possible*. At our discretion (and only in special cases that warrant it), one of the regular exams may be excused. No make-up exams will be given in any circumstance. If you miss two exams, or if you miss the final exam, even for a valid reason, you cannot pass the course.

Lab

Lab sections meet once a week. The written material for labs will be posted on Canvas. Please print it out and bring it with you to lab. *Some labs have a short pre-lab assignment that must be completed before the start of your section.* Pre-lab assignments, when they exist, count as 1/3 of the corresponding lab. Because this course satisfies a college lab requirement, if you miss more than one lab, you will not be allowed to pass the course. Times are available to make up a lab if you have a valid excuse for missing a lab.

Sapling

Each week, there are homework assignments on the online system “Sapling.” These are due at 11:59pm on Tuesday. You are allowed an unlimited number of attempts for each problem, with no penalty for multiple attempts. This allows you to work through the problem on your own, understand your mistakes, and correct your mistakes without fear of losing points. These assignments count for 20% of your course grade. We will drop your lowest homework score when we compute your final grade. Due dates are specified in Sapling. Because we will be dropping your lowest score, no accommodation will be given for internet connection issues or malfunctioning computers. *You are encouraged to work together on homework, but in the end, you are responsible for generating your own solutions and understanding.*

Sapling Access

You should purchase access to the Sapling system through the CU bookstore or directly on the Sapling website. To create an account on Sapling, log into our Canvas course and follow the Sapling link that you see at the top of the page. After this initial log-in through Canvas, you will be able to access Sapling on a daily basis either a) via that same link in Canvas, or b) by directly visiting <http://www.saplinglearning.com>.

Written Homework

In addition to the Sapling assignments there will be written homework due throughout the semester (though not every week). Due dates are specified on the course schedule and on Canvas. These assignments are due by 5pm on Fridays. You will download the homework from Canvas, print them out, fill in the answers, and then turn them in to your TA’s homework drop box by 5pm on Friday. Your lowest score of the term will be dropped. *You are encouraged to work together on homework, but in the end, you are responsible for generating your own solutions and understanding. Your solutions must not duplicate the work of anyone else, either in this course or outside it!*

Attendance & Participation

Lecture capture (video recordings) are available via a link on Canvas.

Multiple choice “clicker questions” will be asked during lectures and you will respond with your iClicker. You may not share or use another student’s iClicker.

Go to <http://www.colorado.edu/oit/tutorial/cuclickers-iclicker-remote-registration> to register your clicker on myCUinfo. Each question will be worth 3 points: 2 points for participation and 1 point for getting the correct answer. Your clicker average will count toward up to 3% extra credit in your final class average. Clicker questions start counting on January 22, and we will drop up to five days of missed clicker points. Because of this policy, you do not need to request that clicker points be excused when you are absent; everyone gets the benefit of the same drop policy.

The Helproom

The TAs and instructors hold their regular office hours in the physics helproom, DUAN G2B87. The helproom is open M–F from 9–5. To learn when a particular person will be staffing the helproom, visit <http://capa.colorado.edu/cgi-bin/HelpRoom>; however, you can come at any time, write your name on the board, and receive help.

The fine print

Disclaimer This syllabus is accurate at the time of writing. The instructors reserve the right to modify the course policies at any time; announcements about changes will be made in class and/or posted on Canvas. Any such changes take precedence over this syllabus. You are responsible for what is said in class, whether or not you are in attendance.

Incompletes Rules of the University require that grades of incomplete (I) may be assigned only if for reasons beyond the student's control, the student is unable to complete the course requirements. Incomplete requests must be made in person to Professors Horanyi or Stenson.

Accommodation For Disabilities If you qualify for accommodations because of a disability, please submit your accommodation letter from Disability Services to your faculty member in a timely manner so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities in the academic environment. Information on requesting accommodations is located on the Disability Services website. Contact Disability Services at 303-492-8671 or dsinfo@colorado.edu for further assistance. If you have a temporary medical condition or injury, see Temporary Medical Conditions under the Students tab on the Disability Services website.

Religious Holidays Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class, you will need to notify a faculty member as soon as possible (and at least one week ahead of time) so that we can work out an appropriate accommodation. See the [campus policy regarding religious observances](#) for full details.

Classroom Behavior Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political affiliation or political philosophy. For more information, see the policies on [classroom behavior](#) and the [Student Code of Conduct](#).

Preferred Names and Pronouns CU Boulder recognizes that students' legal information doesn't always align with how they identify. Students may update their preferred names and pronouns via the student portal; those preferred names and pronouns are listed on instructors' class rosters. In the absence of such updates, the name that appears on the class roster is the student's legal name.

Sexual Misconduct, Discrimination, Harassment and/or Related Retaliation The University of Colorado Boulder (CU Boulder) is committed to fostering a positive and welcoming learning, working, and living environment. CU Boulder will not tolerate acts of sexual misconduct, intimate partner abuse (including dating or domestic violence), stalking, or protected-class discrimination or harassment by members of our community. Individuals who believe they have been subject to misconduct or retaliatory actions for reporting a concern should contact the Office of Institutional Equity and Compliance (OIEC) at 303-492-2127 or cureport@colorado.edu. Information about the OIEC, university policies, [anonymous reporting](#), and the campus resources can be found on the [OIEC website](#).

Please know that faculty and instructors have a responsibility to inform OIEC when made aware of incidents of sexual misconduct, discrimination, harassment and/or related retaliation, to ensure that individuals impacted receive information about options for reporting and support resources

Honor Code All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the Honor Code. Violations of the policy may include: plagiarism, cheating, fabrication, lying, bribery, threat, unauthorized access to academic materials, clicker fraud, submitting the same or similar work in more than one course without permission from all course instructors involved, and aiding academic dishonesty. All incidents of academic misconduct will be reported to the Honor Code: (honor@colorado.edu; 303-492-5550). Students found responsible for violating the academic integrity policy will be subject to nonacademic sanctions from the Honor Code as well as academic sanctions from the faculty member. Additional information regarding the Honor Code academic integrity policy can be found at the [Honor Code Office website](#).