# PHY121-W01 Introductory Physics I

# Fall 2025 Course Syllabus

## General Course Information

**Credit Hours:** 5.000

Class Dates: August 18 – December 9, 2025

**Meeting Times:** This course meets online anytime

**Modality: Online** ANYTIME

**Online Expectations: Online ANYTIME** (Asynchronous) courses are delivered 100% online, with no required face-to-face sessions or scheduled virtual class times. Classes are taught entirely online following instructor timelines and learning outcomes. Students learn content through videos and materials posted by the instructor. Interaction takes place through discussion boards and written messages. All assignments are submitted online. Exams and orientations can all be completed virtually in this modality. Instructors may schedule optional synchronous study sessions as necessary.

**Last Day to Drop for 100% Refund:** August 25, 2025

**Last Day to Withdraw:** November 17, 2025

## Instructor Information

**Name:** Raeghan Graessle

**Prefer to be Addressed As:** Mrs. Graessle, Professor Graessle, Mrs. G or Professor G (she/her/hers)

**Phone:** 847.925.6892 (please use email or Blackboard messages to get in touch)

**Email:** [rgraessl@harpercollege.edu](mailto:rgraessl@harpercollege.edu) (please note the missing “e” – Harper ran out of letters, oops)

**Office Hours:**

Tuesdays/Thursdays: 9:00-10:00 am in Building Y, Room Y103F (my office)

Wednesdays: 9am – 1pm in Building Y, Room Y103F (my office)

**Office Hours Location:** Building Y, Room Y103F OR Webex appointments

**Preferred Method of Communication:** Blackboard messages is the best way to reach me for questions about class work, due dates, grades and help.

**What to Expect from Your Instructor:** You are important. Expect grades and/or feedback on most on-time submitted work within 7 days of submission. I welcome discussions about grades in-person or via Blackboard messages or email. I will respond to your communications within 2 business days – typically I log on 3x per day M-F and 2x Saturdays to check and answer my messages. I take Sundays off, thanks!

## Course Description

**Course Description:** Covers mechanics, heat, fluids, and sound. Intended for students in life science, architecture, and technology. Students pursuing degrees in engineering, physics or chemistry should enroll in PHY 201. Knowledge of high school trigonometry assumed. IAI P1 900L

**Prerequisites:** MTH 140 with a grade of C or better, or placements options into MTH200. Click here for Math placement information: <https://www.harpercollege.edu/testing/mathplacement.php>

**Course Outcomes:** Upon successful completion of the course, students should be able to:

1. Collect scientific information.
2. Analyze scientific information.
3. Present scientific information.
4. Use appropriate forms of quantitative reasoning to analyze scientific problems.
5. Analyze the motion of masses with Newton’s Laws
6. Analyze the motion of masses with conservation principles.
7. Apply wave models to sound.
8. Apply the laws of thermodynamics to systems.

**Expected Technical Skills:** Students are required to perform basic computer processes, such as creating and saving documents and accessing Blackboard and other sites via the internet. In addition, students are expected to submit homework online using Blackboard, Padlet, Pivot Interactives, GoReact and Connect (within Blackboard). Students will be required to use a webcam for many assignments. Finally, students are expected to use Padlet and other online learning sites to get, post and share information. Most of these are embedded in the Blackboard site and do not require separate logins.

## Instructional and Technological Information

### Required Materials

**Readings:**

Title: Connect Online Access (1 Semester) for College Physics  
Author: Giambattista  
ISBN: 9781260486766  
Publisher: McGraw-Hill  
Publish Date/Edition: 5th Publish Date/Edition: 2022, 10th edition  
Textbook Website: Please access via Blackboard  
Instructor Note: This gives you access to Connect (our homework system) as well as the textbook (see below for more info on text).

**Technology:**

* Access to Pivot Interactives
* This course will use the [Blackboard](https://harper.blackboard.com/) learning management system to facilitate coursework and virtual classroom interaction.  For the best experience with Blackboard, you will need a device with access to the internet and a compatible internet browser. Please visit [Blackboard’s Browser Support Page](https://help.blackboard.com/Learn/Student/Ultra/Getting_Started/Browser_Support)to see the current list of browsers and browser versions that are supported. Blackboard has limited functionality on mobile devices, but there is a student Blackboard App available for iOS and Android devices in the Apple App Store and Google Play. Visit the [Blackboard App website](https://www.blackboard.com/teaching-learning/learning-management/mobile-learning-solutions) for more information.  You can contact the [Student Service Desk](https://www.harpercollege.edu/services/techsupport/index.php) at 847.925.6866 or [studentsd@harpercollege.edu](mailto:studentsd@harpercollege.edu) with any Blackboard technical questions.
* Scientific Calculator
* Desktop or laptop computer (smartphone works but only as a last resort) for best experience with Blackboard and other websites. iPads have run into a few issues in the past – be sure to have access to a desktop or laptop just in case.
* Microsoft Office (free for Harper credit students – see Blackboard for more information)
* Smartphone or other video-recording and picture-taking device.
* Webcam

**Other Materials:**

Lab/Portfolio Materials: Metric Ruler, Protractor, scissors, 6 meters of string (any type is fine), 5 items that can hang from string that are different masses, computer paper (at least 100 sheets), scotch tape, 20 pennies or something of similar mass, cylinder, ball, ice cube or a smooth flat-bottomed object, straw, and 3 water bottles. This list may change. Please reach out to the instructor if you’d like her to provide these materials for you for pick-up in the MS Division office. That is totally fine!

## Course Assessments

### Assessment Overview

**Grading Criteria:**

| **Grading Categories** | **Points/Percentage** |
| --- | --- |
| 1. Connect HW | TBD |
| 1. Lab | TBD |
| 1. Portfolio | TBD |
| 1. Participation | TBD |
| **Total** | **100%** |

**Grading Scale:**

| **Final Grade** | **Percentage** |
| --- | --- |
| A | 90.00 - 100% |
| B | 80.00 - 89.99% |
| C | 70.00 - 79.99% |
| D | 60.00 – 69.99% |
| F | 0 – 59.99% |

### Category Descriptions

1. **Connect:** Connect is the homework management website offered by the publisher of our book. You can access Connect via Blackboard. Each week, you will have a set of Connect assignments to complete online. Guided solutions and hints are available. Please note that it is possible to set up a Connect account without paying for a trial period, but you will not be able to complete the whole semester’s work without purchase. The e-version of our textbook is available as part of Connect purchase. We will use the top 12 Connect scores in the final grade. You can re-submit any Connect assignment infinite times up until the deadline for the score you wish. Your highest score on each Connect assignment is what counts towards your grade.

**There are two types of Connect assignment:**

* SmartBook [0 points]: Pre-reading assignments to get you familiar with the vocabulary and ideas before we study them in class. These are not worth points.
* Connect [20-30 points]:15-30 Practice problems that focus on mathematical skills and problem-solving.

1. **Lab:** It is critical in a physical science course that you get experience in the lab. For this modality, the lab will be at home and the online site Pivot Interactives. First, we will be doing a series of labs using common materials such as string, rulers, protractors, and stopwatches. These labs will help you build our 7 essential lab skills. As the class progresses, we will add a few online labs using the Pivot Interactives website. Just like an in-person lab, the Pivot labs will require you to practice our 7 essential lab skills. Final Lab Records are to be done individually (unless stated otherwise) and absolutely no copying is allowed. Feeding lab questions into AI and pasting AI’s answer is also not allowed. Please see the syllabus section on Academic Dishonesty for more information. Labs are graded only once – there are no lab re-dos.

**You need a 70% or better on the lab component to pass this course.**

1. **Portfolio:** Traditional pen-and-paper tests are not the best way to measure your physics abilities. Instead, you will build a portfolio with 1-7 entries throughout the semester (it’s up to you how much to do, based on what final grade you aspire to in the course). The Portfolio Entries will consist of a given physics case study which you recreate in real life and then take measurements. Next, you use your physics skills to calculate, solve and evaluate everything you can about the scenario. These portfolios are to be done in SHOWCASE style, where all work is shown in an organized manner. You can choose how to present your Portfolio; common choices include PowerPoint, Padlet, and hand-written posters. Grading for each entry is pass/fail and you’ll get multiple tries (1 try/week) to pass each until the final meeting date of the course. More details can be found in the Portfolio Learning Module. **While open-book and open-internet in nature, these are not to be done with other students, AI, tutors etc**.
2. **Participation:** After viewing lectures, students will set aside time dedicated to the practice of physics. Practicing physics is difficult and requires grit and perseverance. The participation grade is to reward students for doing this practice. Each week, students will be required to upload their practice work for the week to earn this grade. Showing work in a specific way (called the SHOWCASE method) is required for all participation problems. There will be 16 of these scores throughout the semester (one per week during the regular school year, two per week in the summer session).

### Assessment Policies

**Grading and Feedback:** All material turned in for a grade must be your own work. All work must be neat and legible. All work must be complete; calculations must include all steps and correct units. All work must contain your full name.

**AI Policy:** Using AI responsibly will be a part of this course. Using AI responsibly is allowed on most assignments in the class (but not all – see below), as long as you follow the two rules.

On Homework, Practice, and Lab Assignments, using AI is allowed to help you brainstorm and solve problems. Please note that any solution AI gives to physics problems in PHY121 has a 15% chance of being wrong (this is data from recent physics research), so don’t blindly trust what it tells you. If you use AI, here are two rules to follow:

1. Never cut and paste the AI solution directly into your work. Rewrite the solution to be your own. This looks like:

* Writing out all math by hand
* Making sure the equations used match the ones from our official equation sheet. If they don’t, you’re responsible for deriving the equation you used with AI from the equations on our sheet. Don’t worry! Most of the time this is not too tough, and I am here to help you with it, too!
* Making sure you follow SHOWCASE (showing your work) protocols
* Adding diagrams
* Adding your own notes to the solution like “here we substitute equation 1 into equation 2” and other helpful things like arrows and boxes around answers.
* Adding units to every step, even middle ones

1. Take the time to redo the problem later by yourself (without AI) so you prove to yourself that you’ve also learned the material and that you are smarter than AI.

On labs, AI is pretty horrible and students who’ve used it have had the following things happen (just in the last two semesters!). I don’t recommend using it on lab:

* AI makes up data that doesn’t match reality
* AI makes up results that don’t match reality
* AI convinces students their amazing data is bad
* AI makes super awful graphs and charts! Like, what the heck, how is it so hard, AI?

Treat AI like a robot-textbook. It’s super useful for book-knowledge, but at some point, you’ll be called on to do the work without it open. It’s bad at lab knowledge so far. Always be ready to prove yourself.

**Huge, Big Rule: AI is not allowed to be used on the Portfolio Assessments for any purpose whatsoever.**

**Mrs. G reserves the right to ask you to conference with her to determine your knowledge and capabilities for any assignment in the class**. Here’s an example:

*Oh no! You’ve accidentally written an answer on a lab that sounds like it’s from AI and not in your voice. Mrs. G will get in touch with you regarding this and require that you redo the assignment. This could mean that you do a new, similar lab, make a video of yourself explaining the solution to the lab, or meet with her on Webex so you can teach her your solution “live”.*

**Mrs. G reserves the right to award zeros on assignments for overuse of AI. My job is to certify that you, your lovely human self, that I can’t wait to get to know, learned physics this semester and can do it by yourself.**

**Late Work Policy: A planner is provided with suggested due dates for all assignments.** Because different types of assignments build on each other in unique ways, different categories have different late policies:

**Connect, Participation and Lab Late Policy:** Assignments in these categories will be accepted for full credit up to two weeks after the assignment is due in the planner. No assignments are accepted after the course close date of 11:59 pm CST on December 9, 2025.

**Portfolio Late Policy:** Portfolios are assignments that allow you to try again. If you do not earn certification the first time you turn in an entry, you get to try again. Students are allowed one draft per entry per week. Starting portfolio late usually results in a lower grade in the class. No work will be accepted after 11:59 PM CST on December 9, 2025.

It is strongly recommended that students stick to the planner on all assignments, as this flexibility in due dates is meant to be used rarely. If students become too far behind, the professor will get worried and proceed to pester them.

**Attendance:** This course is Online Anytime and attendance is not formally tracked as part of the grade.

**Course Surveys:** Near the end of this course, you will be invited to participate in a survey. The feedback you provide is valuable to me, as your instructor, as well as Harper College. The comments you share are completely anonymous and the compiled confidential results will not be released until after final grades have been posted for the entire semester. You may access the survey through a link you will receive in your Harper College email account or directly via Blackboard. Surveys are *usually* available three weeks before the last day of class. *Note: Course surveys are administered in Fall and Spring semesters only.*

## Course and College Policies

**Academic Dishonesty**: The College reserves the right to set and communicate reasonable standards of behavior.Students are expected to uphold college standards related to academic honesty. The following behaviors, as outlined in the [Student Code of Conduct](https://www.harpercollege.edu/catalog/handbook/policies/academic/student_conduct.php)**,**are considered academic dishonesty and are prohibited. Examples are provided to illustrate the specific prohibition and are not intended to be all-inclusive.

* Cheating (accessing or using unauthorized materials, information, or technology, including artificial intelligence/chatbots/etc.)
* Plagiarism (reproducing someone else’s words or ideas without accurate acknowledgment)
* Falsifying information (providing untrue information)
* Unauthorized collaboration (getting assistance or sharing work without permission, including sharing of course materials through a 3rd party means without instructor approval)
* Facilitating academic dishonesty (participating in an act that creates an unearned advantage for someone)

**Equal Educational Opportunity Statement:** In providing educational programs and opportunities, the College will not discriminate against any individual on the basis of race, color, religion, sex, national origin, ancestry, age, marital status, sexual orientation, gender-related identity, disability, unfavorable discharge from military service, or any other legally protected category. It is the intent of the Board of Trustees to comply with all applicable local, state, and federal statutes, regulations and ordinances prohibiting such discrimination.

If you believe you have experienced discrimination or harassment (whether on or off campus) that affects your ability to participate in class or any of Harper College’s programs, please seek assistance from any of the following resources:

* For gender-based or sexual misconduct (including sexual assault and sexual harassment) by any person, visit the [Harper College Title IX resource page](http://harpercollege.edu/titleIX) to learn more about your support and reporting options.
* For any other harassment/discrimination by an employee, contact the College’s Chief Human Resources Officer at 847-925-6216.

Please be advised that faculty members are required to report to the College if they learn that a crime, harassment, or discrimination may have occurred.

### Student Conduct: All participants in this course are expected to follow the [Student Code of Conduct](https://www.harpercollege.edu/catalog/handbook/policies/academic/student_conduct.php) and other applicable College policies. All are expected to contribute to an environment that maximizes students’ ability to learn and the instructor’s ability to teach. The Student Code of Conduct and related information at the [Harper Student Conduct resource page](http://harpercollege.edu/conduct) outlines these expectations and provides resources and reporting options for students.

Open discussion and disagreement are encouraged when done respectfully and in the spirit of academic discourse. There are a variety of behaviors that, while not against a specific College rule, may create disruption in this course. Students whose behavior is disruptive or who fail to comply with the instructor may be dismissed from the class for the remainder of the class period and may be required to meet with the instructor or Dean prior to returning to the next class period. If necessary, referrals may also be made to the Student Conduct process for violations of the Student Code of Conduct.

**Dispute Resolution:** All Harper students have the right to express their concerns regarding their experience in the classroom, including the assessment of their performance or difficulties with other students. Students should first contact their instructors with any questions or concerns. If students and instructors cannot resolve concerns together, students should follow the [Student Academic Complaint Process outlined in the Student Handbook](https://www.harpercollege.edu/catalog/handbook/policies/academic/student_complaint.php).

**Student E-mail Notifications & Privacy:** All notifications related to student registration or other business activities are sent to students via their Harper College email account (XXXX@mail.harpercollege.edu) that is assigned to students upon registration. Students access this account via an icon in the student portal (where you registered for classes). Please check this e-mail frequently. To forward e-mails from this account to a personal email account please [follow these instructions](https://www.harpercollege.edu/sis/lum/myharperemail/forwardemail.pdf).

Please be advised that your education records are subject to a federal privacy law called the Family Education Rights and Privacy Act (FERPA). As a result, please be aware that you (not your parent(s), spouse, or other such person) will generally need to be the one to ask questions, file complaints, or otherwise interact with the College and faculty about your academic performance in this class.

**Blackboard Privacy and Accessibility Statements:** Blackboard is the learning management system used at Harper College. It provides a secure Web space for delivery of instructional course materials. Blackboard’s [privacy statement](http://www.blackboard.com/footer/privacy-policy.aspx) and [accessibility statement](https://www.blackboard.com/accessibility.aspx) are available for review.

**Alternative Formats for Course Content in Blackboard:** Harper College courses use the [Blackboard Ally](https://youtu.be/tOORcSEjtJU) tool, which offers students [alternative format options](https://help.blackboard.com/Ally/Ally_for_LMS/Student/Alternative_Formats#which-format-should-i-use_OTP-1) for course content. When available, indicated by an “A” icon to the right of an item in Blackboard, you can click on the icon to download course content in formats that work best for you. Need help? Check out the [Ally Help for Students](https://help.blackboard.com/Ally/Ally_for_LMS/Student) or contact the [Service Desk](https://www.harpercollege.edu/services/techsupport/index.php) with questions about downloading alternative file formats.

**Copyright Statement:** The materials on this course website are only for the use of students enrolled in this course for purposes associated with this course and may not be retained or further disseminated. For more information, please visit the [Harper College Copyright/Fair Use resource page](https://www.harpercollege.edu/library/services/copyright.php).

## Student Support Resources 2025-2026

### Student Safety and Well-Being

Students may experience stressors that can impact both their academic experience and their personal well-being. These may include academic pressure and challenges associated with relationships, mental health, alcohol or other drugs, identities, finances, etc.

If you are experiencing concerns, seeking help is a courageous thing to do for yourself and those who care about you. Please reach out for support. We offer the following resources:

**Hawks Care:** It can be challenging to do your best in class if you have trouble meeting basic needs like safe shelter, sleep, and nutrition. If you have difficulty affording groceries, accessing sufficient food to eat every day, or lack a safe and stable place to live, Hawks Care Resource Center is here to help you connect to campus and community resources to meet those basic needs so you can focus on your academic goals. If you are experiencing homelessness or are at risk of experiencing homelessness, please contact Christina Paskon at 847.925.6658 or pc09477@harpercollege.edu.

* Phone: 847.925.6633
* Email: [hawkscare@harpercollege.edu](mailto:hawkscare@harpercollege.edu)
* To learn more visit: [Hawks Care](https://www.harpercollege.edu/services/counseling/hawkscare/index.php)

**Counseling Services:** Whether you are looking to set meaningful goals, stay motivated, manage stress, work through personal challenges, or build stronger habits for success, Counseling Services is here to help you thrive in and out of the classroom. Support includes short-term individual therapy (8 to 10 sessions per academic year), skills workshops and group sessions. All services are provided by licensed clinical mental health therapists and are available to currently enrolled students free of charge. For longer term therapeutic needs, a referral to a community provider will be provided.

Anonymous mental health screening is available online through [Mental Health America](https://screening.mhanational.org/screening-tools/)

Harper students also have free access to WellTrack, a mobile app with self-help tools and resources anytime, anywhere as well as Togetherall providing 24/7/365 anonymous, online, peer support

* Additional information about [Togetherall](https://account.v2.togetherall.com/register/student)
* Additional information about [WellTrack](https://www.harpercollege.edu/services/counseling/welltrack.php)
* To learn more visit: [Counseling Services](https://www.harpercollege.edu/services/counseling/index.php)
* Phone: 847.925.6393

In need of immediate or crisis care?

* + National Suicide & Crisis Lifeline: Call or text 988 (press 1 if you are a veteran)
  + Crisis Text Line: Text HOME to 741741
  + LGBTQ+ Trevor Project: Text START to 678-678
  + BIPOC: Text COALITION to 741-741
  + Kenneth Young Center Crisis Line: 847.383.0406
  + Ascension Crisis Line: 847.952.7460
  + The Living Room, Trinity Services, Inc: 708. 981.3370
  + The Living Room, Kenneth Young Center: 224.619.4741

**Harper College Police:** Contact the Harper College Police for emergency assistance or to report a crime.

* Phone: 847.925.6330

**Harper Department of Risk Management:** Provides a safe and healthy environment for faculty, staff, students, and visitors to Harper College. Please familiarize yourself with the procedures outlined in the [Harper College Emergency Procedures Manual](https://www.harpercollege.edu/about/police/emergency/procedures/index.php) and [accompanying video](https://www.youtube.com/watch?v=fnJ0TQ-WZuw) to keep you safe on campus.

* Phone: 847.925.6913
* To learn more visit: [Environmental Health, Safety, and Risk Management](https://www.harpercollege.edu/about/directory/ehs/index.php)

**Harper Early Alert Team (HEAT):** HEAT is a multidisciplinary campus threat assessment and behavioral intervention team that guides the campus community in effectively assessing and addressing threatening and/or concerning behaviors. HEAT strives to assist the campus in intervening with someone before their behaviors reach a critical level.

* To learn more or to report a threat: [Harper College HEAT](http://goforward.harpercollege.edu/about/directory/heat/)

**Harper Wellness:** Harper College is committed to providing a campus culture and environment that strives to promote and enhance the overall wellness of its students, staff, faculty and surrounding community. Harper Wellness provides various programs, events and resources so everyone is supported and best prepared to LEARN WELL. WORK WELL. and LIVE WELL. Harper Wellness provides a variety of resources including free sexual health supplies, at-home pregnancy tests, Narcan, drug testing strips, emergency contraception, free flu shots, nutrition consultations, and light therapy lamp rentals. Students can also request to meet one-on-one with the Wellness Manager regarding a variety of wellness topics by contacting Harper Wellness at [wellness@harpercollege.edu](mailto:wellness@harpercollege.edu).

* Phone: 847.925.6963
* Email: [wellness@harpercollege.edu](mailto:wellness@harpercollege.edu)
* To learn more visit: [Harper Wellness](https://www.harpercollege.edu/wellness)

### Student Success

**Academic Advising**: Students are encouraged to meet regularly with their assigned academic advisor and can schedule through the MyHarper Student Portal or by calling 847.925.6220 to learn more about options for virtual and in-person appointments. Academic advisors provide educational planning support and can connect you to additional resources to help you overcome challenges or barriers. Students who do not have an assigned academic advisor can contact Advising Services to schedule an appointment.

* Phone: 847.925.6220
* To learn more visit: [Advising Services](https://www.harpercollege.edu/services/advising/index.php)

**Academic Support Center:** The Academic Support Center provides free tutoring for the courses you are currently enrolled in as a Harper student. Tutoring is available on an appointment and drop-in basis, both online and in-person. Services in the Academic Support Center include:

* Anatomy Room
* Developmental Math Center
* Success Services
* Supplemental Instruction
* Tutoring Center
* Writing Center

For more information or to schedule an appointment, you can

* Stop by the Academic Support center in F 110
* Call us at (847) 925-6539
* Email us at [asc@harpercollege.edu](mailto:asc@harpercollege.edu)
* Chat with us on our website: [Academic Support Center](https://www.harpercollege.edu/academic-support/index.php)
* Log in to your MyHarper Student Portal (click on “Academic Success”)

**Access and Disability Services:** Harper College strives to make all learning experiences as accessible and inclusive as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please let Access and Disability Services (ADS) know immediately at 847.925.6266. ADS will privately discuss the options you have, including possible accommodations. You are encouraged to register with ADS by filling out the online application that can be found on the ADS website. Once approved by ADS, please make arrangements with your instructor as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. In-person and virtual appointments are available.

* Phone: 847.925.6266
* Email: [ads@harpercollege.edu](mailto:ads@harpercollege.edu)
* To learn more visit: [Access and Disability Services](http://www.harpercollege.edu/ads)

**Computer Labs:** Campus labs are staffed to assist students with logging on and off, accessing specific applications and printing their work. Labs are open to all currently enrolled Harper students.

* To learn more visit: [Harper College Computer Labs](http://goforward.harpercollege.edu/services/techsupport/computerlabs.php)

**Job Placement Resource Center (JPRC):** Assists students to become successful in their search for employment opportunities. Help is available with resumes, interviewing, job search, co-ops and internships, and on-campus employment as Student Aides.

Harper College students have access to free resources to help create a resume using VMock, Practice Interview Skills with BIG Interview, or to learn about the “soft skills” and job search techniques using Career Spots.

* Resume writing: [VMock](https://www.vmock.com/harper)
* Career Focused Videos: [Career Spots](https://www.careerspots.com/newplayer/default.aspx?key=Er7qYpxvfJCcKnNE9RYxDQ2&type=false&pref=https://www.harpercollege.edu/&src=VLI&)
* Interviewing Assistance: [Big Interview](https://resources.biginterview.com/big-interview/student-guide/)

Students can also take advantage of JPRC services by scheduling an appointment.

* Location: I 117
* Phone: 847.925.6400
* Email: jprc@harpercollege.edu
* To learn more visit: [Harper College JPRC](https://www.harpercollege.edu/jprc/index.php)

**Library:** The Library is committed to providing resources and services, as well as physical space, computing facilities, research assistance and instruction to support and enhance teaching and learning. The Library’s collection includes books, eBooks, DVDs, streaming media, periodicals, and databases. The library also supports student success by offering research assistance (both in person and virtually), information literacy instruction, programming, and interlibrary loan services.

[The Library technology loan program](https://www.harpercollege.edu/library/services/semester-loan-technology.php) assists students by providing semester long loans of Chromebooks, Wi-Fi hotspots and calculators. Please call or email the library at 847.925.6584 or [semesterloantech@harpercollege.edu](mailto:mail%20to:semesterloantech@harpercollege.edu) with questions concerning technology loans.

The Library provides a variety of student study and learning spaces including quiet study, group study rooms, collaborative spaces, and maker space. Additionally, the library provides recreational materials such as bestsellers, graphic novels, and LPs. The library houses more than 100 computers as well as black & white and color printing for students. For more information about the library, contact information, and Library hours please visit the Library website shown below.

* Phone: 847.925.6584
* Email: [circ@harpercollege.edu](mailto:circ@harpercollege.edu)
* Website: <http://www.harpercollege.edu/library/index.php>

**Military and Veteran Students:** If you are a member of the military community and need accommodation for Drill schedules, calls to active duty, and other unforeseen military and veteran related developments, contact your **Academic Advisor**. For opportunities to connect and participate in activities and workshops with other Veteran and Military-Connected Students (service member, spouse, parent, sibling), contact us below.

* Phone: 847.925.6555
* To learn more: [Veterans and Military-Connected Students](https://www.harpercollege.edu/services/involvement/veterans/index.php?utm_medium=redirect&utm_campaign=redirects-https&utm_source=/veterans)
* Follow us on Instagram: [@Harpercollegesva](https://www.instagram.com/harpercollegesva/)

**OneStop:** The OneStop is available by phone, email, or chat to help with registering for classes, updating records, financial aid and payment plans. They can help answer your questions or point you in the right direction.

* Phone: 847.925.6710
* To learn more visit: [One Stop](https://www.harpercollege.edu/start/onestop/index.php)
* Contact Us: A qr code on a white background

  AI-generated content may be incorrect.

**Student Service Desk (Technical Help):** The Student Service Desk assists all students by providing information and support for Harper Student E-mail Accounts, MyHarper Student Portal, and Blackboard access.

* Phone: 847.925.6866
* Email: [studentsd@harpercollege.edu](mailto:studentsd@harpercollege.edu)
* To learn more visit: [Student Service Desk](https://www.harpercollege.edu/services/techsupport/index.php)

**Undocumented Students:** Harper College’s Undocumented Student Liaison (USL) can assist you with financial aid, campus services, scholarship information, and other resources. Their services are confidential and are also available to students from mixed-status families. For more information contact Dr. Sandy González Rivas.

* Location: [Building A 250E](https://maps.harpercollege.edu/?id=762#!m/95549?share) by One Stop
* Email: [gs32128@harpercollege.edu](mailto:gs32128@harpercollege.edu)
* Website: [Undocumented Student Resources](https://www.harpercollege.edu/undocumented/index.php)

NOTE: In alignment with Harper College's commitment to fostering respectful dialogue and inclusive learning environments, students discussing immigration status in coursework should use precise, respectful terminology. Use "undocumented immigrant(s)" rather than "illegal(s)" when referring to undocumented immigration as it is a non-offensive and more accurate term.

This language guideline reflects our institutional values of respect and dignity for all people, supports our mission to create safe spaces for diverse perspectives, and maintains academic rigor. Using accurate, person-first language demonstrates our shared responsibility to "respect, value, and learn from a wide range of ideas and perspectives" while ensuring all community members feel valued in our educational environment.

# PHY121-W01 Introductory Physics I

# Fall 2025 Course Schedule (subject to change)

| **Week** | **Topics/Outcomes** | **Labs (Portfolio Due Dates TBA)** |
| --- | --- | --- |
| Week 1  8/18-8/23 | Introductions  Math Review (1.3-1.6)  Vectors (2.1-2.3) | Introduction to Pivot Ping-Pong Bazooka |
| Week 2  8/24-8/30 | Forces (2.1-2.3)  Free Body Diagrams (2.4-2.5) | Pendulum 1 |
| Week 3  8/31-9/6 | Gravity, Contact Forces, Tension (2.6-2.8)  Newton’s 2nd Law (3.1-3.4)  **College Closed Monday 9/1** | \*\*no lab, Labor Day\*\* |
| Week 4  9/7-9/13 | Newton’s 2nd Law (3.1-3.4) | Pendulum 2 |
| Week 5  9/14-9/20 | Motion with Constant Force (4.1-4.2) | Pendulum 3 |
| Week 6  9/21-9/27 | Free Fall, Projectiles (4.3-4.6) | Simple Harmonic Motion 1 |
| Week 7  9/28-10/4 | Conservation of Energy, Work, Kinetic Energy (6.1-6.3) | Simple Harmonic Motion 2 |
| Week 8  10/5-10/11 | Gravitational and Elastic Potential Energy (6.4-6.7) | Free Fall 1 |
| Week 9  10/12-10/18 | Impulse-Momentum, Collisions (Ch 7, all) | Free Fall 2 |
| Week 10  10/19-10/25 | Circular Motion (5.1-5.3, 5.5-5.7) | Parachute Challenge |
| Week 11  10/26-11/1 | Rotational KE, Inertia & Torque (8.1, 8.3) | Superconducting Puck Lab |
| Week 12  11/2-11/8 | Rotational Equilibrium, Statics (8.4-8.6) | \*\*no lab\*\* |
| Week 13  11/9-11/15 | Simple Harmonic Motion (10.5-10.8)  Waves (11.1-11.10) | Windmill & Standing Waves Lab |
| Week 14  11/16-11/22 | Sound & Music (12.1-12.9) | Traveling Waves Lab |
| Week 15  11/23-11/29 | Fluids (9.1-9.8)  **College Closed 11/26-11/30** | \*\*no lab\*\* |
| Week 16  11/30-12/6 | Temperature (13.1-13.3)  Heat (14.1-14.5) | \*\*no lab\*\* |
| Finals Week  12/7-12/9 |  | **All Portfolio Entries Due Tuesday 12/9 @ 11:59 pm** |