General Physics Lab 206 (01:750:206), Spring 2026

Course Administrator: Dr. Hao Wang, (haowang@rutgers.edu), Office: SRN-202

> (If you need to send an email to the course administrator, make sure you include your full name, course and section number in your email. Scheduling questions should be taken to Ms. Katherine Lam (klam@physics.rutgers.edu) of the Undergraduate Office.)

This course is conducted in-person in one of the Physics lab rooms on Busch or Douglass; it is not an online or remote course (unless the University mandates a change of instructional mode). **In-person attendance is mandatory** - unless the student is required to quarantine due to illness or suspected illness.

Learning Management System:

Canvas (https://rutgers.instructure.com/courses/381692)

Lab Manuals, the course schedule and information on sections and instructors can be found on the Canvas course site. There are no textbooks to purchase.

Instructor Office Hours:

Your TA will decide on their office hours upon consulting with the class, during or shortly after the first lab meeting. TAs are required to devote at least one hour of total time to this and must also be open to meeting with students at alternate times. TAs may hold their office hours online.

Technology Requirements:

A reasonably current (hardware and software) laptop, with built-in webcam and microphone; the last two may be of use in case a lab partner needs to join their lab group remotely due to quarantine.

Since the vast majority of students have smartphones, they can also be used for incorporating pictures of hand drawings or equations into the electronic lab report, thanks to their very capable cameras. They may also be indispensable in cases of power outages in lab rooms, and for showing close-up of the apparatus to lab partners (as discussed above).

Lab reports will be written concurrently by lab partners on Google Docs and will be shared with TA; they are to be finished before the end of the lab period.

Learning Goals:

This course is the second half of a two-semester survey course sequence that covers Introductory Physics at the university level. The topics to be covered include Electrostatics, DC and AC Circuits, Magnetism, and Modern Physics (Light Wave Interference, Special Relativity, Radioactivity). Students will be taught to collect, graph and analyze experimental data to either confirm a physical law already learned from lecture – or to discover the nature of a law themselves by finding relationships between variables and drawing scientific conclusions from these.

Academic Integrity:

Although conversations with other groups in the same class are allowed, the work on each group's lab report is to be done only by its members; **sharing or copying of lab reports – whether in part or whole – with individuals or group from other lab groups in the same class or in another class is forbidden for both parties**. **Quizzes are strictly individual efforts; no sharing or copying with any individual or group is allowed**.

IMPORTANT: The use of A.I. (Artificial Intelligence) such as ChatGPT, Gemini or Copilot is not permitted in any stages of the writing process on any lab report or quiz. In addition, using "cheat" websites such as Chegg.com and CourseHero.com to find answers or solutions to questions on the lab write-up or quiz is also considered cheating – as is sharing these answers or solutions with others.

Violations of any of the above can be construed as academic dishonesty. In addition, **the use of others' work – not just from books and articles, but also from course material, including lecture slides, lecture recordings, presentations and other materials used in this course – constitutes theft of intellectual property**. The University takes very seriously an author's rights to their intellectual property, which is protected by U.S. law. **Infringing on these rights is also a violation of academic integrity and can also have legal ramifications outside the University** (lawsuits by the owner of the intellectual property).

Penalties for academic integrity violations:

- **Violations of academic integrity may lead to a grade of F or XF (disciplinary F) in the course and other more serious sanctions such as suspension or dismissal from the University.**
- **In addition, for students who may apply to medical schools in the future, any small incidents of academic dishonesty will be noted in the record by the University and passed on to the medical schools upon request.**

For more information, please read this Guide for Students regarding Academic Integrity as well as the University's Academic Integrity Policy.

Self-Reporting Absence Application:

If you have been told to quarantine, or are experiencing symptoms of any transmittable disease, please remain at home and do not come to class. **Do contact your TA** t**o inform them of your situation**; you should also report your absence to the Self-Reporting Absence Application.

If you anticipate missing more than one classes for serious illness, confidential, or sensitive personal reasons, you should also consult with the Dean of Students who will help to verify your extended absences from classes.

Course Structure, Requirements, Policies:

Grading Scheme:

The final numerical grade is weighted from:

- 10 Lab Reports ….60% of grade
- 6 Quizzes (lowest grade dropped) ….40% of grade

The final letter grade will be determined by the following cutoffs:

- 90 or above…A
- 85 or above…B+
- 80 or above…B
- 75 or above…C+
- 70 or above…C
- 60 or above…D
- below 60……..…F

The lab class will consist of:

- An initial announcement by the TA pertaining to section information during the first lab and any announcement or assessment of previous lab or quiz during subsequent labs.

- A brief introduction to the week's lab topic by the TA, including a demo of the lab apparatus, and discussion of associated theory and how it relates to the lab activities.

- Lab activities that include formulating theories to make predictions, using lab equipment to perform experiments, and analyzing data to draw conclusions and to test and refine theories.

• Submission of the group lab report, completed by the end of the period. The lab report grade will be shared by all group members. **Each lab partner will be required to contribute equally to the lab report, and this includes being on time to your lab to collaborate with your lab group**. The *Version History* feature of Google Docs will enable the TA to see how much each lab partner contributed. Although the lab partners will share the lab report grade, points may be deducted from the lab partner who contributed relatively little to it, commensurate to the percentage less than a 100% contribution (where 100% is when a student contributed 1/3 to the total work of a trio of lab partners, or 1/2 to a duo of lab partners).

• A quiz during 6 selected lab meetings, lasting 20min and always at the start of the period. The quiz will be **open book** (only textbooks, lecture notes and lab manuals are allowed) and based on the previous one or two labs you performed. Quizzes are administered via paper, or through Canvas. In either case these are individual efforts and **collaboration is not allowed**. Each quiz may consist of multiple-choice, writing formulas, matching, ordering, numeric, file upload (including scans/photos of handwritten calculations and answers) - or a combination of any of these. **Calculators are permitted to use during quizzes.**

Make-up Labs:

If you cannot attend your section, you should try to attend another one that same week. Please consult the list of alternate sections, their instructors and emails on Canvas. Email your regular instructor as well as the instructor of the section in which you intend to make up your lab that same week, to ask for their permission. If granted, you should ask your lab partners in the make-up section to also share their Google Docs lab report with you.

If this arrangement is not possible, usually only **ONE** special make-up lab is allowed near the end of the semester. If you have good reasons for missing your lab:

- personal illness or injury
- special University work or research conflict, e.g. invited presentation
- serious illness or death in the family
- military service
- game or associated travel for University athletes

...please talk to your TA who will decide if you are entitled to a special make-up lab. Supporting evidence of your reason may be requested.

Religious Observance:

Students should inform TAs in advance regarding missing class due to a religious observance. Here is a list of University-acknowledged religious observances. Students are strongly encouraged to make up the missed lab in another section if possible.

Instructor Complaints: Most of the instructors who teach in the physics department are competent, respectful and fair individuals. Relatively rarely, we get serious complaints about ones who do not fit this description, and this detracts from their students' educational experience. Unfortunately, we get most of these complaints near the end of the semester, when students are concerned about their instructor's comportment or actions (or lack thereof) affecting their final grades.

We treat these complaints with the utmost seriousness and want to address the problem *as soon as possible* - and not near the end of the semester, when it is too late to do anything about it. We encourage you to first try to resolve the issue amicably with your instructor but, if that is not possible, you can contact us about your instructor issue - the complaint will be kept **anonymously** (you will not be identified) unless you expressly allow it. Email Dr. Hao Wang at haowang@rutgers.edu regarding your serious instructor complaint.

Additional Academic Help:

In addition to receiving assistance from your TA during their office hours, students are encouraged to take advantage of the University's academic support resources:

- Student Success Essentials
- Student Support Services
- The Learning Centers
- Academic Advising for SAS students

Student Wellness Services:

The university provides a number of resources to support your physical and mental well-being. Several valuable resources are listed below, and you are encouraged to contact the administrator for more guidance about university resources.

- Office of Disability Services
- Office for Violence Prevention and Victim Assistance
- Bias Incident Reporting
- Office of Veteran and Military Programs and Services
- Student Health Services

- Counseling, Alcohol and Other Drug Assistance Program & Psychiatric Services (CAPS)
- UWill: free immediate access to teletherapy; you can choose a therapist based on your preferences including issue, gender, language, ethnicity.
- Basic Needs Assistance (food, housing, and other essentials)