Principles of Physics 1

Last Updated: Sat, 01/03/2026

Course prefix: PHYS

Course number: 2211

Section: HP

CRN
30461

Instructor first name: Emily

Instructor last name: Alicea-Munoz

Semester: Spring

Academic year: 2026

Course description:

An introductory course which will include mechanics (kinematics, dynamics, work and energy, momentum and collisions, and rotational motion and statics), and may also include oscillations and computational methods. This is a calculus-based course.

Academic honesty/integrity statement:

Students are expected to maintain the highest standards of academic integrity. All work submitted must be original and properly cited. Plagiarism, cheating, or any form of academic dishonesty will result in immediate consequences as outlined in the university's academic integrity policy.

The policy on academic honesty as stated in the Honor Code will be fully enforced during this course for both the instructors and student. All Honor code violations will be referred to the Dean of Students office.

- Collaboration with other students in this course on homework assignments, lab assignments, and in-class activities is permitted and encouraged.
    - For lab experiments, students are allowed to collaborate in performing the experiment and collecting data, but all data analysis, coding, and video lab reports must be individual.
- **Collaboration is NOT PERMITTED during tests or the final exam.**
    - These activities are closed internet, closed books, closed notes, with the following exceptions:

        - Students are allowed a copy of the formula sheet found on Canvas (which will be included in the exam papers).
        - Students are allowed blank sheets of paper (which will be included in the exam papers).
        - Students are allowed a calculator (as long as it cannot communicate with other calculators, which means no smartphone calculator apps are allowed).
    - Students must work on the tests individually and receive no assistance from any other person or resource.
    - Work submitted outside of the testing period will not be graded.
- Students who post course content to online resources external to Georgia Tech (e.g, Chegg) will be referred to the Dean of Students office for Academic Misconduct.

Core IMPACTS statement(s) (if applicable):

This is a Core IMPACTS course that is part of the Technology, Mathematics & Sciences area.

Core IMPACTS refers to the core curriculum, which provides students with essential knowledge in foundational academic areas. This course will help master course content, and support students' broad academic and career goals.

This course should direct students toward a broad **Orienting Question**:

- How do I ask scientific questions or use data, mathematics or technology to understand the universe?

Completion of this course should enable students to meet the following **Learning Outcome**:

- Students will use the scientific method and laboratory procedures or mathematical and computational methods to analyze data, solve problems and explain natural phenomena.

Course content, activities and exercises in this course should help students develop the following **Career-Ready Competencies**:

- Inquiry and Analysis
- Problem-Solving
- Teamwork