

Introductory Physics I

Last Updated: Mon, 01/05/2026

Course prefix: PHYS

Course number: 1111

Section: QH

CRN (you may add up to five):
34935

Instructor First Name: Prabha

Instructor Last Name: Padukka

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 will include thermodynamics and waves. Elementary algebra and trigonometry will be used.

Course learning outcomes:

- Develop critical, analytical, thinking skills and promote deductive reasoning to find creative, practical solutions.
- Develop ownership and accountability in the learning process, while developing collaborative working skills and effective communication skills
- Analyze and evaluate a physical situation, using multiple representations such as written conceptual statements, mathematical equations, diagrams, and graphs, and be able to translate from one representation to another.
- Apply the concepts you learn in this course to your day-to-day life and relate the applicability of these concepts to your future career paths.

Required course materials:

"Urone/Hinrichs College Physics 2016 update published by OpenStax"

This is a FREE textbook you can access using the link below.

https://assets.openstax.org/oscms-prodcms/media/documents/College_Physics-WEB_2s5sHvR.pdf

Access to canvas.

A calculator, a smart phone.

Access to webassign for homework.

Grading policy:

Grading System

Your final grade will be computed as follows:

Welcome Module 2 %

Pre-Class Activities 5 %

In-Class Participation and Activities 10 %

Homework 8 %

Quizzes 10 %

Labs 25 %

Capstone Project 15 %

Exams 10 %

Final Exam 15 %

The standard 10-point scale will be used to assign letter grades;

A: [90%,100%]; **B:** [80%, 90%); **C:** [70%,80%); **D:** [60%, 70%); **F:** [0, 60%)

Attendance policy:

This course is delivered in hybrid format. You are expected to attend all scheduled sessions.

- Lectures will be taught in a “asynchronous” and “flipped” manner. You will watch the lesson videos and complete the Lecture Activity on **Tuesdays and Thursdays**.
- A *Teaching Assistant* (TA) will review course material and facilitate a session, known as recitation via *TEAMS* on **Mondays and Wednesdays**.
- Lastly, you will meet with the instructor to review the week’s material and ask any questions you have via *TEAMS* on **Fridays**.

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.