

PHYS 251: University Physics I

Instructor: Ahmad Itani

Asynchronous Online Course: Fall, 2026

E-mail: ahmad.itani@ndus.edu

Office Hours: M-W-F: 10:00 am - 12:00 pm (or by arrangement)

In-Person Office Location: South Engineering 212A

Virtual meeting address: [Ahmad's Personal Zoom Meeting](#)

Course Description

Physics 251 is an introductory course for students with a calculus background. The course will tackle Newtonian mechanics of translational and rotational motion, work, energy, power, momentum, conservation of energy and momentum, periodic motion, waves, sound, heat, and thermodynamics. Beyond this, subjects will be chosen based on the time available.

Required Materials

- A device with access to the internet.
- Course notes and video lectures will be made available on Blackboard each week.
- There will be no required textbook.

Prerequisites/Corequisites

Prerequisites: MATH 165 - Calculus or an equivalent.

Course Structure

Class Structure

Lecture

Recorded lectures along with supplemental materials will be provided on a weekly basis weekly on Blackboard.

Homework and Quizzes

Homework problems and quizzes will be posted with time before zoom assessments. Students will not be able to use their notes during the zoom assessments, but it is still a good idea to keep all homework and quizzes and use them to prepare for assessments. It is advised to complete these assignments as it will be very difficult to keep up with the coursework without doing so.

Exams

There are no scheduled formal written exams in this course. Instead of exams, two optional virtual oral exams are offered to increase the students grade. Students will have to sign up and schedule a time with the instructor to be able to participate in that assignment, this activity is done in order to test the students fundamental understanding of the material covered-more information on that later.

Grading Policy

The typical NDSU grading scale will be used. The instructor reserves the right to curve the scale dependent on overall class scores at the end of the semester. The grade will count the assessments using the following proportions:

- 30% of your grade will be determined by homeworks assigned on BlackBoard.
- 55% of your grade will be determined by the weekly quizzes assigned on BlackBoard.
- 5% of your grade will be determined by the virtual oral presentation (this will count as a Midterm exam).
- 10% of your grade will be determined by the final oral presentation (this will be considered the Final exam).

Course Policies

Attendance Policy

This is an asynchronous class, therefore attendance will not be taken.

Policies on Late Assignments

Late assignments will be accepted for no penalty if a valid excuse is communicated to the instructor before the deadline. After the deadline, late assignments will be treated on a case-by-case basis.

Academic Integrity and Honesty

The academic community is operated on the basis of honesty, integrity, and fair play. NDSU Policy 335:Code of Academic Responsibility and Conduct applies to cases in which cheating, plagiarism, or other academic misconduct have occurred in an instructional context. Students found guilty of academic 3/3 misconduct are subject to penalties, up to and possibly including suspension and/or expulsion. Student academic misconduct records are maintained by the Office of Registration and Records. Informational resources about academic honesty for students and instructional staff members can be found at.

Generative Artificial Intelligence statement

Students are allowed and encouraged to use advanced AI tools and Large Language Models throughout this course in a way that supports understanding of the course material and prepares for the oral exams (during which the use of any software is not permitted).

Accommodations for Disabilities

Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, please contact the Disability Services Office as soon as possible (www.ndsu.edu/disabilityservices). Accordingly, North Dakota State affirms its commitment to maintain a work environment for all employees and an academic environment for all students that is free from all forms of discrimination.

Anti-Discrimination Statement

Discrimination based on race, color, religion, creed, sex, national origin, age, disability, veteran status, or sexual orientation is a violation of state and federal law and/or North Dakota State University policy and will not be tolerated. Harassment of any person (either in the form of quid pro quo or creation of a hostile environment) based on race, color, religion, creed, sex, national origin, age, disability, veteran status, or sexual orientation also is a violation of state and federal law and/or North Dakota State University policy and will not be tolerated. Retaliation against any person who complains about discrimination is also prohibited. North Dakota State's policies and regulations covering discrimination, harassment, and retaliation may be accessed at the North Dakota State University Policy Manual, Section 156, which can be found at <https://www.ndsu.edu/policy/>