

PHYSICS 211 - COLLEGE PHYSICS I (3 CREDITS)

Spring 2025

Instructor: Tyler Garcia	Time: MWF 3:00 – 3:50
Email: tyler.garcia.1@ndsu.edu	Place: NDSU Sudro Hall, Room 24

Course Materials

1. Primary Text: “College Physics: Reasoning & Relationships - Second Edition” by Nicholas J. Giordano.
2. Pencil/pen for taking exams
3. Scientific calculator with no internet access for taking exams
4. Any other course materials (e.g: lecture slides, solutions, etc.) will be posted to Blackboard

Learning Assistant

Logan Endicott will be the learning assistant for the class. During lectures, he will help answer questions students have with clicker questions and he will run demos in the class.

Office Hours

Tyler: Monday, Tuesday, Wednesday, and Thursday from 12:00 PM to 1:00 PM or by appointment in South Engineering Room 212A.

Logan: Monday and Wednesday from 1:00 PM to 3:00 PM at a table in the Union or by appointment.

Course Description

Beginning course for students without a calculus background. Includes basic principles of bodies at rest and in motion, fluids, vibrations, waves, sound, and thermodynamics. Prereq: MATH 105 or higher.

Course Objectives

The main goal of this course is to provide students with the ability to understand classical mechanics, wave mechanics, fluid motion, and thermodynamics. Students should also be able to provide well-reasoned explanations to support their answers. The learning objectives for this class are:

- Use mathematics to solve problems about forces, energy, momentum, waves, and fluids.
- Construct explanations that clarify and contextualize physical scenarios alongside their corresponding answers.
- Develop and use models to analyze thermodynamic systems.
- Analyze and interpret data to solve problems related to wave motion.

Grade Breakdown

Your grades will be determined by the following cutoffs:

		Total Percent	Letter Grade
Participation:	10%	88-100	A
Homework:	15%	76-88	B
Quizzes:	15%	64-76	C
Midterms:	45% (3 x 15%)	52-64	D
Final:	15%	<52	F

I have the right to lower the grade cutoffs; however, they will not be raised.

Participation

Participation in this class will be based on clicker questions. To participate in clicker questions, you must have a clicker or download the Echo360 app on your phone. Clicker questions will not be graded for correctness. To install the app or set up your account, go to the following [link](#). If you answer more than 80% of the clicker questions, you will receive the full 10% of the participation grade.

Homework

We will use the LON-CAPA system for all homework assignments. To set up your account, go to the following [link](#) and click on “forgot password”.

Quizzes

Every Friday there will be an in-person quiz based on that week’s topics. The quizzes will be group quizzes of up to three people per group. The quizzes will be 10 points each: 5 points for completion and the other 5 points for correctness. Your lowest quiz will be dropped at the end of the semester.

Midterms

There will be three midterms total in this class. Each midterm will have the following format: four free response questions (25 points each) and five multiple choice questions (5 points each, 25 points total). On each exam, the lowest scored question will be dropped (the five multiple choice questions count as “one question”). I will supply an equation sheet for every test that will be available at least a week before the exam. You will take the midterms individually.

Final

The final will be the exact same format as the midterms: four free response questions (25 points each) and five multiple choice questions (5 points each, 25 points total). On each exam exam, the lowest scored question will be dropped (the five multiple choice questions count as “one question”).

Late Policy

If you need a homework extension, please let me know as soon as possible so we can work something out. If you miss an exam or a quiz due to an emergency or an important event is happening, please let me know so we can schedule a make-up exam or quiz. Otherwise, you will receive a 0 for that exam or quiz score. Veterans and student service members with special circumstances or who are activated are encouraged to

notify the instructor as soon as possible and are encouraged to provide Activation Orders.

Important Dates

The following mid-term dates are tentative. If I have to change any of the midterm dates, I will let everyone know one week in advance of the new date.

- Last day to drop class with no record on the transcript: Thursday January 23rd
- Last day for W on your transcript: Friday April 11th
- First day participation will be recorded: Wednesday January 22nd
- First midterm: Wednesday February 5th
- Second midterm: Wednesday March 5th
- Third midterm: Wednesday April 2nd
- Final: Thursday May 15th at 3:30 pm in NDSU Sudro Hall, Room 24

Accommodations

Any students with disabilities who need accommodations in this course are invited to share these concerns or requests with the instructor and contact the Center for Accessibility and Disability Resources as soon as possible at this [link](#).

Family Educational Rights and Privacy Act (FERPA)

Your personally identifiable information and educational records as they relate to this course are subject to FERPA.

Academic 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 misconduct are subject to penalties, up to and possibly including suspension and/or expulsion. Student academic misconduct records are maintained by the Office of the Provost. Informational resources about academic honesty for students and instructional staff members can be found at the following [link](#).

Tentative Course Outline

The following link is a [tentative schedule](#). I reserve the right to change the schedule to accommodate things. I will update this course outline as the semester progresses.