

Northern Illinois University

Course Syllabus for Physics 210 --- Mechanics & Heat

Spring Semester, 2021

Instructor: Dennis Eugene Brown

Faraday West 208W and/or 213W

DEBrown.niu.edu@gmail.com

Office Hours: TTh 10am-12noon

tel: 630-910-5512

Physics 210 WebPage: www.niu.edu/brown

Course Textbook: College Physics (OpenStax) **Author:** Urone & Hinrichs

Location: <https://openstax.org/details/books/college-physics>

Online Homework: Expert TA: <https://theexpertta.com>

We will be covering the following material in OpenStax: (Tentative Schedule)

Kinematics (1 dimension):	Chapter 1&2
Kinematics (2 dimensions):	Chapter 1&3
Quiz #1	
Newtonian Mechanics:	Chapter 4&5
Rotational Motion:	Chapter 6
Quiz#2/Rotational Dynamics:	Chapter 9&10
Midterm Exam	
Conservation of Energy:	Chapter 7&10
Conservation of Momentum:	Chapter 6&10
Fluids:	Chapter 11&12
Quiz #3	
Temperature & Ideal Gases:	Chapter 13
Heat:	Chapter 14
Thermodynamics:	Chapter 15

Final Exam (Thursday, April 29, Noon-1:50 p.m.)

No labs will be accepted after the last day of classes (April 23, 2021, 12:00midnight)

Problem Sets will be posted on www.niu.edu/brown every week, and they will be due one week later at the beginning of the class (**not at the end of class**). Late homework will be penalized 15% per day (however, *the problem sets just before quizzes&exams*—and the final problem set will not be accepted late).

All quizzes and exams are closed book, and closed notes. Graphics Calculators and Cell Phones will not be allowed, only scientific calculators can be used.

Tentatively: All Problems Sets will make up 10% of the **lecture** grade

Each quiz	“	“	5%	”	”
Midterm	“	“	30%	”	”
Final Exam	“	“	45%	“	“

Lecture grade will make up 75% of the **final** grade

Lab will make up 25% of the **final** grade

The lowest scoring Problem Set will not be counted towards the final grade.

Physics Tutors: <https://us.bbcollab.com/guest/18a2fad67c5c424f82d363689e14140f>

Additional Notes:

- (1) When the solutions are posted on Blackboard, late homework will no longer be accepted.
- (2) All labs are to be handed in to your Lab TA via Blackboard. Do not send any labs to me.
- (3) Homework should have the following format (or you will be penalized up to a maximum of 50% per assignment):

The diagram illustrates the required format for a homework assignment. It features a rectangular box representing the assignment sheet. On the left side of the box, there is a vertical line. To the left of this line, the text 'Put # of problem to the left of the vertical line. If you use graph or blank paper, draw the vertical line.' has two red arrows pointing to the vertical line and the number '1' in a circle. Inside the box, at the top right, is a section for student information: 'First, Last Name', 'Course', 'Date', and 'Instructor's Name'. A red arrow points from the text 'Put this info in the upper right hand corner.' to this section. Below the student information, the text 'Homework #1' is centered. Below this, there are two numbered sections: '1 Write your Solution to Problem #1 here showing all your work & figures' and '2 Write your Solution to Problem #2 here showing all your work & figures'. To the right of the box, a red circle contains the text: 'Homework must be written in on a separate sheet of paper, *not on the Problem Set handout.*'

- (4) For Quizzes & Exams, the solution to each problem is to be put on separate pages in the blue booklet (which will be provided). There will be a maximum of 10 points deducted for each quiz & exam for not following these rules.

ACCESSIBILITY: Northern Illinois University is committed to providing an accessible educational environment in collaboration with the Disability Resource Center (DRC). Any student requiring an academic accommodation due to a disability should let his or her faculty member know as soon as possible. Students who need academic accommodations based on the impact of a disability will be encouraged to contact the DRC if they have not done so already. The DRC is located at the Campus Life Building, suite 180, and can be reached at 815-753-1303 or drc@niu.edu.

HONOR CODE: Be aware of the policies and procedures regarding your rights as well as responsibilities that are published in the NIU Student Code of Conduct, which is available on line at: <https://niu.edu/conduct/pdf/niu-scc-final.pdf>.

Working with other students on homework is encouraged, but outright copying (plagiarism) of other student's work is strictly forbidden and will be reported to the NIU administration.

Expert TA Terms of Service: Expert TA problems are copyrighted. It is expressly forbidden in Expert TA's Terms of Service (TOS) for a student to post this copyrighted material. Violating the TOS can result in discontinuation of the student's Expert TA account.