

# Northern Illinois University

## Course Syllabus for Physics 210 --- Mechanics & Heat

Fall Semester, 2020

**Instructor:** Dennis Eugene Brown      Faraday West 208W and/or 213W  
DEBrown.niu.edu@gmail.com  
**Office Hours:** TTh 9am-12noon      tel: 630-910-5512

**Course Textbook:** College Physics (OpenStax)    **Author:** Urone & Hinrichs  
**Location:**                    <https://openstax.org/details/books/college-physics>  
**Physics 210 WebPage:** [www.niu.edu/brown](http://www.niu.edu/brown)

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

Kinematics (1 dimension):	Chapter 1&2
Kinematics (2 dimensions):	Chapter 1&3
<b>Quiz #1</b>	
Newtonian Mechanics:	Chapter 4&5
Rotational Motion:	Chapter 6
<b>Quiz#2</b> /Rotational Dynamics:	Chapter 9&10
<b>Midterm Exam</b> Carl Sandburg Auditorium 3:30-4:45	
Conservation of Energy:	Chapter 7&10
Conservation of Momentum:	Chapter 6&10
Fluids:	Chapter 11&12
<b>Quiz #3</b>	
Temperature & Ideal Gases:	Chapter 13
Heat:	Chapter 14
Thermodynamics:	Chapter 15

**Final Exam** (Tues, Dec. 8, 4-5:50 p.m.) Location not known yet

**No labs will be accepted after the last day of classes (Dec 4, 2020, 12:00midnight)**

Problem Sets will be posted on [www.niu.edu/brown](http://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 10% per day (however, Problem Sets # 3, 6, 9—*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

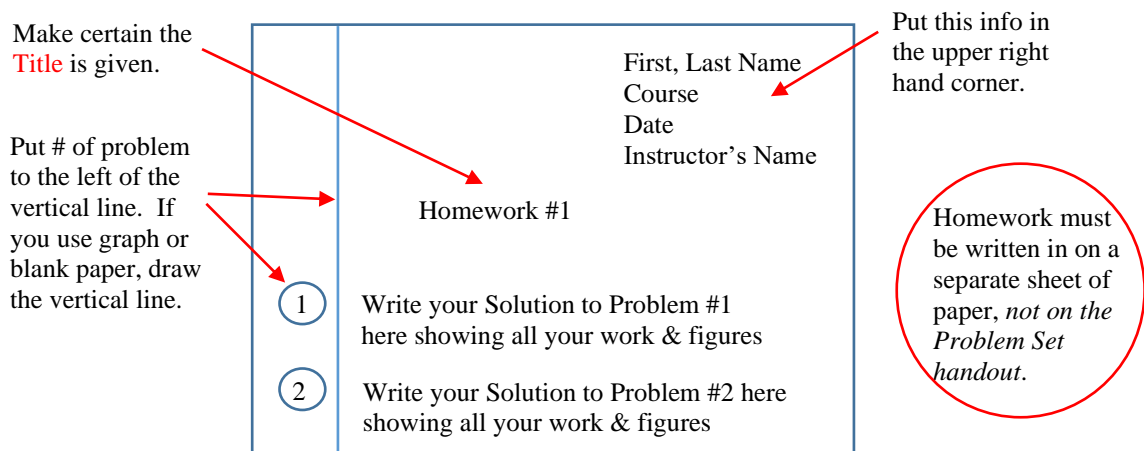
Lab will make up 25% of the **final** grade

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):



- (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](mailto: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-sec-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.