

General Physics II

Course Syllabus

1. Instructor:

Name: Dr. Andy Hollerman
Rank: Professor of Physics and Radiation Safety Officer
Class Dates: Monday, Tuesday, Wednesday, and Thursday
Class Time: 10:00 to 10:50 am CT
Class Location: Broussard Hall 214
Office Number: Room 107 Broussard Hall
Office Hours: Tuesday, Wednesday, and Thursday 7:00 – 8:00 am CT
Tuesday, Wednesday, and Thursday 9:00 – 10:00 am CT
Other times by appointment
No office hours on Friday
E-Mail: hollerman@louisiana.edu
Phone Number: (337) 278-4632

2. Course Objectives

Upon completion of this course, students will be able to: 1) Draw reasonable conclusions within the natural sciences by applying key processes and scientific reasoning, 2) Evaluate credibility of information with scientific content by using critical and logical thinking, knowledge of accepted scientific methods, and appropriate sources, 3) Define/explain scientific terms used in mechanics, waves, heat, and temperature, and 4) Apply the laws of physics to solve both quantitative and qualitative physics.

3. Course Textbook and Electronic Homework:

- Course Textbook: Halliday, Resnick, and Walker, *Fundamentals of Physics, 12th Edition*, Wiley and Sons, 2021.
- Electronic Homework Solution: *WebAssign* (<http://www.webassign.net>).

I use the *WebAssign* electronic homework solution in this course. I DO NOT USE *WileyPlus* or *Moodle* in this course. Access to *WebAssign* is bundled with an electronic copy of the textbook. In order to save money, I suggest students DO NOT buy or rent a hard copy of the textbook from the Bookstore. Paying for *WebAssign* gives you access to an electronic copy of the recommended textbook. If you already have obtained a copy of our textbook from any source, then you are fine. However, you will still have to pay to access *WebAssign* with the electronic book. You will not pass this course if you don't register for *WebAssign* since it is being used for both homework and some quizzes.

4. Attendance and Office Hours:

This is a rigorous course. Students should keep up with class by doing the homework and quizzes in a timely fashion. Attendance will be counted as part of your overall grade. The compressed nature of the material will cause students to easily get behind. I will give a surprise quiz from time to time when I notice students not turning in homework. Please contact the instructor before the due date and time if you have problems accessing the course material.

I will conduct office hours on campus in room 107 of Broussard Hall from 7:00 – 8:00 am and 9:00 – 10:00 am CT on Tuesday, Wednesday, and Thursday of each week. I will take in-person requests in my office for help on a first come, first served basis. Consultation times outside of my standard office hours must be pre-arranged by the student with the instructor. No office hours will be held on Fridays.

5. Academic Honesty:

I have a no tolerance for cheating. Please be aware of this when completing exams, homework problems, and quizzes. The printed UL Lafayette conduct policy can be found on line at: <http://studentaffairs.louisiana.edu/student-conduct/code-student-conduct-and-appeal-procedures>. Please do your own work! If you are unsure of this policy, please contact me. Using homework sites like Chegg® is not cheating. However, Chegg and other such sites can be used to cheat. I will compare your exam answers with Chegg and other such sites to see if you used their answers. If

I find this to be true, I will give that student a zero for the problem. It is my philosophy to teach students in this class how to solve problems and not memorize solutions. No appeals of this policy will be allowed.

6. Use of AI Tools in Class:

For the last several semesters, it has become clear that students are using artificial intelligence tools (like Chat GPT) to help them in class. Students need to be reminded that AI does not teach physics. AI tools in physics face several significant challenges that impact their effectiveness and reliability. Below are the main identified issues:

<u>Issue</u>	<u>Description</u>
Reliability	AI struggles with accurate calculations and reasoning capabilities.
Reproducibility	Many claims about AI effectiveness are not consistently replicable.
Problem Complexity	Difficulty in solving complex, well-structured physics problems.
Generalization	Limited ability to apply learned solutions to new problems.

Using AI tools for physics often leads to more confusion. I have developed many physics problems to test a student's ability to understand and comprehend the material. Trying to solely use AI tools to pass PHYS 201 (without studying or asking questions) will likely end in failure. I believe that using AI tools in this class short circuits the usual learning process. In fact, I believe that the over-use of AI tools is cheating. Since 2020, I've seen students earn 100% on electronic homework assignments and then completely miss the same problem on exams. I believe that AI tools are mostly responsible for this situation. My advice to you is to ASK QUESTIONS and DO THE PROBLEMS without trying to look up the answers. Remember the answers are less important than the methods used to get them. In this class, you may use generative AI tools for brainstorming and basic research but must develop and compose your final answers independently. If you have questions or suggestions for potential exceptions, please contact me. I want to discourage students from using AI tools in this class. Over-use of AI tools is considered grounds for cheating.

7. Format and Grades:

Format: PHYS 202-002 will be taught on-campus and instruction will be given in Broussard Hall room 116. No exceptions to this policy will be allowed.

Examinations: All students will take a total of five (5) section examinations worth 100 points each during this course as shown in the table below. These exam dates are tentative that can be changed at my discretion as needed. Exam questions will be similar in structure to problems in *WebAssign* and in the book. Students will be asked to derive equations from work that was done in class.

All exams will be given on the dates and times shown below in the standard pencil and paper format in Broussard Hall room 214. For these exams, students are not allowed to use any books, notes, calculators/computers, or other media. Students will not be allowed to leave the room during exams for any reason. Please let me know in advance if this is going to be a problem. Please be on time for exams. Students will not be allowed to make-up exams in electronic formats. **Students who miss more than two exams during the semester will automatically fail the course.**

Class exam date, time, type, and location table (CT is Central Time).

Exam	Date	Time	Type	Location	Limitations
One	September 15	10:00 – 10:50 am CT	Traditional paper and pencil exam	Broussard Hall 214	No electronic devices of any kind allowed during exam
Two	October 1				
Three	October 21				
Four	November 9				
Five	December 7*	2:00 pm – 3:30 pm CT			
Make-Up	December 7**	Immediately after Exam Five			

* Exam Five will be given during the final exam period on Monday, December 7, 2026 at 2:00 – 3:30 pm CT. This exam cannot be made up.

** Exams One, Two, Three, or Four can be made up with a comprehensive paper and pencil exam scheduled immediately after Exam Five on Monday, December 7, 2026 over 90 minutes. Students can only be allowed to make-up **only one** missed exam. Students will receive a zero on all other missed exams. No exceptions will be made. Students who miss more than two exams during the semester will automatically fail the course.

ODS: For students to use the Office of Disability Services (ODS) to take exams, I must receive the electronic approval notice by the end of the last business day before the scheduled first exam. Only students who have a catastrophic change in their health will be allowed to start using ODS after this date. I want students to take all five exams either in class or at the ODS testing center and not in a combination of both places. **Students who use ODS will not be allowed to take exams before the**

scheduled date and time. Exams will be delivered to ODS 30 minutes before the scheduled exam time. ODS cannot be used to take in-class quizzes or any other homework/quiz assignment.

Make Ups: Students will only be allowed to make up a maximum of **one** missed exam. A percentage grade earned on a specially constructed comprehensive make up examination will be used to replace the missed exam. Students who miss more than one exam will earn zeros on those exams. Exam Five will be given during the scheduled final exam period, which is from 2:00 – 3:30 pm CT on Monday, December 7, 2026. The 90 minute make-up examination will be given immediately following Exam Five. **Students cannot take the make-up examination in place of Exam Five. No other make-up exams will be allowed. Students must contact the instructor to schedule the make-up exam. I selected the final exam time and date to accommodate my schedule. Please do not use any other source to find the final exam time and date. Students who miss Exam Five or the scheduled make-up examination will not be allowed another chance to make it up.**

Homework: I will use the Internet-based *WebAssign* service during this course. Students will have accounts where they can go and do homework or selected quiz problems. The base homework assignment is shown in the schedule table. These problems are representative of the scope and depth of the covered material. Each student should work all of the homework problems using *WebAssign*. All homework grades will be posted on *WebAssign*. Deadline extensions for *WebAssign* homework will not be allowed. Students who do not attempt any *WebAssign* homework over the semester will receive an F in the course. Students should expect to complete at least 16 *WebAssign* assignments during the semester. Students will not be allowed to turn in assignments solely on paper. The total homework grade is worth 50 points, which is 50% of a section examination grade.

Quizzes: From time to time, I will give *WebAssign* or paper and pencil quizzes over the covered material. Grading criteria will be shown on the first page of each quiz. The total quiz grade is worth 50 points, which is 50% of a section examination grade. Quizzes usually cannot be made up.

Extra Credit: From time to time during the semester, I will give students assignments for extra credit. Extra time or extensions in the completion time **are not** allowed for extra credit assignments.

Course Grades: Course grades will be calculated based as follows (maximum possible):

Section Examinations (100 points each x 5 exams)	=	500 points
Electronic <i>WebAssign</i> Problems	=	50* points
Quizzes (<i>WebAssign</i> or pencil and paper format)	=	50 points
Total PHYS 202-002	=	600 points.

* Based on two grades of “zero” for *WebAssign*. Bonus points will be awarded for fewer missed assignments. Points will be deducted for additional missed assignments.

Electronic *WebAssign* Problems: It is my desire that students complete 100% of all homework assignments. Also, I know solutions for many of the *WebAssign* problems are available on the internet and in other places like Chegg. I will assign credit for homework quizzes based on the number of “zero *WebAssign* grades” each student has accumulated. A “zero *WebAssign* grade” is defined as an assignment where a student earned less than 85% of the listed *WebAssign* points. For example, a student earns 7 out of 15 *WebAssign* points on a given chapter homework assignment. In this case, the student would have earned a zero (0) *WebAssign* grade, since the student earned less than 85% on that assignment ($7/15 = 47\%$). Every student can get two (2) zero *WebAssign* grades without adversely affecting their homework grade. Contact the instructor if you think there has been a mistake in grading your *WebAssign* homework.

The table below gives the conversion for the number of zero *WebAssign* grades to the earned points used to calculate the *WebAssign* final grade. For example, a student has four zero *WebAssign* grades as defined above. In this case, the student would earn 40 out of a total of 50 points when the final homework grade is calculated. Any student who misses a combined total of eleven (11) or more homework assignments will earn zero homework points and will likely *fail* the course. Students who do not register for *WebAssign* will be given zero homework points. Students who have less than two (2) zero *WebAssign* grades will be given bonus points as noted in the table below.

Number of zero *WebAssign* grades to find earned final grade points table.

Number of Zero <i>WebAssign</i> Grades	Earned Points for <i>WebAssign</i> Final Grade
0	55 points
1	52.5 points
2	50 points
3	45 points
4	40 points
5	35 points
6	30 points
7	25 points
8	20 points
9	15 points
10	5 points
≥11	0 points

Student final grades will be curved based on student data. Your instructor will periodically give you information as the semester unfolds as to the exact nature of the map. Please note that grades for students who stop coming to class will be removed from the calculation. As a basis, I will map grades based the usual and standard UL Lafayette grading scale: A = 90 - 100%, B = 80 - 89.9%, C = 70 - 79.9%, D = 60 - 69.9%, and F ≤ 59.9%.

8. Emergency Evacuation Procedures:

A map of this floor is posted near the elevator marking the evacuation route and the Designated Rescue Area. This Designated Rescue Area is an area where emergency service personnel will go first to look for individuals who need assistance in exiting the building. Students who may need assistance should identify themselves to the faculty.

9. Syllabus:

A copy of this syllabus can be found on the Internet at the following URL: http://www.drandy.org/phys201_001.pdf.

10. Schedule:

Tentative PHYS 202-002 class schedule.

Class Period	Material Covered	Class Dates	Reading Assignment
1	Introduction	Aug 24	Chapter 21
2 – 3	Chapter 21	Aug 25 – 26	Chapter 22
4 – 6	Chapter 22	Aug 27 – Sep 1	Chapter 23
7 – 9	Chapter 23	Sep 2 – 8	Chapter 24
10 – 12	Chapter 24	Sep 9 – 14	Chapter 25
13	Exam 1	Sep 15	Exam Covers Chapters 21–24
14 – 15	Chapter 25	Sep 16 – 17	Chapter 26
16 – 18	Chapter 26	Sep 21 – 23	Chapter 27
19 – 22	Chapter 27	Sep 24 – 30	Chapter 28
23	Exam 2	Oct 1	Covering Chapters 25–27
24 – 25	Chapter 28	Oct 5 – 6	Chapter 29
26 – 28	Chapter 29	Oct 7 – 13	Chapter 30
29 – 32	Chapter 30	Oct 14 – 20	Chapter 31
33	Exam 3	Oct 21	Covering Chapters 28–30
34 – 36	Chapter 31	Oct 22 – 27	Chapter 32
37 – 38	Chapter 32	Oct 28 – 29	Chapter 33
39 – 42	Chapter 33	Nov 2 – 5	Chapter 34
43	Exam 4	Nov 9	Covering Chapters 31–33
44 – 47	Chapter 34	Nov 10 – 16	Chapters 35 – 36
48	Chapters 35 – 36	Nov 17	Chapter 37
49 – 54	Chapter 37	Nov 18 – 30	Chapters 38 – 44 (Selected Topics)
55 – 57	Chapters 38 – 44	Dec 1 – 5	Prepare for Exam 5
58	Exam 5	Monday, December 7 @ 2:00 pm*	Exam Covers Chapters 34 – 44
	Make-Up Exam	Monday, December 7 After Exam 5	Only One Missed Section Exam

* Exam five is scheduled for 2:00-3:30 pm on Monday, December 7, 2026, which is part of the standard University final examination period. The comprehensive make-up examination will be held immediately following exam five. Students will be given 90 minutes to complete the make-up examination. Students only need to take the comprehensive examination if they missed section Exams One, Two, Three, or Four and have prior permission of the instructor. Students can only replace one missed section exam using this method. Students who miss more than one exam will get a zero for those additional grades. Students who miss more than two exams will automatically fail the course.

11. WebAssign:

Introduction

I am going to have students self-enroll to use *Webassign* using the following steps given below.

1. Go to the following URL webpage: <https://www.webassign.net>.
2. Once you get to the page and login, click on the *Enter Class Key* button on the top part of the page.
3. Once the page is loaded, enter the following text string (left to right): ***louisiana00945182***. In other words, enter: *louisiana* followed by 0094 and 5182 with no spaces between the individual number strings. Click the *Enroll* button when complete. The URL link for enrollment is ***<https://www.getenrolled.com/?courseKey=louisiana00945182>***.
4. *WebAssign* should recognize this code and respond back that you are in PHYS 202-002 at the University of Louisiana at Lafayette and I am the instructor. If this information is displayed, click *Yes, this is my class*. If this information is not displayed, come to my office and we will go through it.
5. Once your class key is recognized, you can enter your username/e-mail address and password to get started with *WebAssign* (existing account), or you can Create Account (new account). You can even link an existing *WebAssign* account at this step.

Please note that students need to be proactive with *WebAssign* and Cengage if you are having problems with your account. Please contact Cengage directly to solve problems. Students will not be given extra time to complete assignments if they are having individual problems. I will give all students schedule relief if there is a problem with *WebAssign* that globally effects everyone. Remember, all students will have to pay to utilize *WebAssign*.

Assignments Page

After correctly submitting your entrance information on the student entry page, you will automatically enter the Assignments page. It contains detailed information (chapter#, questions? - problems?, - pop quiz?) the due date and time of graded assignments, # of submissions permitted, grading policy, grades, etc.) about each of the present and past due assignments. This page also contains links to the guide, FAQs, password change, etc. Clicking an individual assignment link enters you into a specific assignment with a description. Pay attention to the due dates. *Review Last Submission* on previous assignment submissions.

- A Problems/Exercises assignment is numerical and is allowed three submissions with the last grade being counted. Note that numerical values in *red* are different for each student. Save your analysis in a form that permits easy re-working for your next submission, especially if the browser crashes. A bonus system will be created to give students more points if they do their problems early in the assignment period. Conversely, points will be reduced for answers that are correct on the third attempt.
- A Surprise Quiz assignment is allowed only two submissions and generally will be announced and administered on the same day. It will tend to be used to indirectly check class attendance. The bonus and bonus and penalty system will also be used for Surprise Quizzes.

Grading of Assignments/Keys

Grades are available shortly after each submission. This contains your detailed assignment grade result. Assignment keys containing the correct answers are available after the assignment due date.

Practice Assignments

Read the information on the Guide link and then do the initial *WebAssign* assignment for practice and insights to the correct way to provide answers.

Contact Information

I will initially use your UL Lafayette email address for personal communication. It is your responsibility to email to me any change of your email address. Correspond with me at hollerman@louisiana.edu. My office phone number is (337) 482-5063.