Physics 213: General Physics I Fall 2021

Course Description: This course is the first part of an algebra-based treatment of introductory physics. Topics include Newtonian mechanics, energy, rotational motion, fluids, oscillations and waves. Of the courses Phys 107, Phys 211, and Phys 213, only one can be counted toward a degree.

Course Objectives:

- Develop conceptual reasoning and physical understanding.
- Improve numerical problem solving skills.
- Solve problems including kinematic equations, forces, conservation of energy and momentum, rotational equilibrium, hydrostatics, and fluid dynamics.
- Understand wave motion and the properties of sound.

Prerequisite: (Math 121 and Math 123) or Math 125 or Math 261

Corequisite: Phys 223: Laboratory Physics I

Lectures: Section 1: MWF 1:00 – 1:50 pm in Lewis 101

Section 2: MWF 4:00 - 4:50 pm in Brevard 134

Testing: some Thursdays (see schedule) 7:00 - 8:50 pm

Instructor: Dr. Jennifer Meyer (call me Dr. Meyer or Prof. Meyer)

Phone: 662-915-2673

E-mail: <u>jameyer2@olemiss.edu</u> (this is the best way to reach me)

Office Hours: Tuesday 12:30-1:20 on Zoom https://olemiss.zoom.us/j/9246403326

Wednesday 2:00-2:50 in Lewis 104

Friday 2:00-3:50 in Lewis 104

or 1:1 by appointment in Lewis 211 or Zoom

Textbook: College Physics, 11th edition by Serway and Vuille.

e-book access is sufficient and included with the homework system

Required Materials:

WebAssign (online homework) access

 Scientific calculator without internet access. If purchasing a new calculator, I recommend TI-30XS MultiView or TI-36X Pro.

Grading: Online Homework 120 points (12 x 10 points each)

Offline Homework 120 points (24 x 5 points each)

Exam 1 100 points
Exam 2 100 points
Exam 3 100 points
Exam 4 100 points
Final Exam 100 points

Total Possible 740 points

Grading scale:

680.8 ≤ points ≤ 740	Α	(percentage ≥ 92%)
666 ≤ points < 680.8	A -	$(90\% \le percentage < 92\%)$
643.8 ≤ points < 666	B +	(87% ≤ percentage <90%)
606.8 ≤ points < 643.8	В	(82% ≤ percentage <87%)
592 ≤ points < 606.8	B -	$(80\% \le percentage < 82\%)$
569.8 ≤ points < 592	C +	(77% ≤ percentage <80%)
518 ≤ points < 569.8	С	(70% ≤ percentage <77%)
444 ≤ points < 518	D	(60% ≤ percentage <70%)
0 ≤ points < 444	F	(percentage <60%)

Online homework:

Online homework will be due on Fridays at 11:59 pm Central Time and **should be accessed through the WebAssign link under Course Content on Blackboard**. The link will bring you to both the homework assignments and the e-book. WebAssign is available for purchase on its own (through the Blackboard link) or through Cengage Unlimited, a subscription that gives you access to all Cengage products.

WebAssign Single Term	\$100	Valid only for this textbook, this term.
WebAssign Multiterm (LOE)	\$125	Valid for this textbook, for the lifetime of this edition of the book. Best option if you plan to take 214 at UM soon and don't have other classes using Cengage textbooks or digital learning platforms.
Cengage Unlimited (4 months)	\$119.99	Includes unlimited access to Cengage textbooks or digital learning platforms for as many of your classes as are using Cengage products.
Cengage Unlimited (1 year)	\$179.99	"
Cengage Unlimited (2 year)	\$239.99	u .

WebAssign has a two week grace period to use it free before paying – so I recommend holding off on purchasing access until you have figured out which of these options is best for you.

Online homework must be completed by the deadline for full credit, but can be completed after the deadline for partial credit by requesting an extension on WebAssign. In order to receive an automatic extension, you must request an extension on WebAssign before you view the key and no later than 14 days after the homework due date. The portion of the homework that you complete after the deadline will be worth 25%. If you completed some problems before the deadline, they will be worth full credit.

Offline Homework:

Solutions to two problems, worth 5 points each, will be turned in via Blackboard on Fridays by 11:59 pm Central Time. You can write your work on paper and then use a free phone app (Adobe Scan, Tiny Scanner, etc) or a physical scanner to create the pdf to upload. Or, if you have a tablet, you can do your work on there and save it as a pdf.

I will be posting the solutions to these problems on Blackboard shortly after the due date, so I won't be able to accept late submissions without prior permission – if you have a special circumstance or issue, email me on or before the due date.

Exams:

Four exams and a mandatory comprehensive final, as shown on the schedule on the last page. The dates of the exams and final will not change unless class is canceled for unforeseen reasons (weather, emergency, etc.). The chapters covered on each exam may change, if needed. No make-up exams will be given unless arrangements are made in advance or the same day, in case of unforeseeable emergencies. If you miss an exam or the final without making prior arrangements, you will receive a zero.

The lowest midterm exam score (including a zero) can be replaced with the final exam score, if the final exam percentage is higher than the lowest midterm exam percentage. At the end of the term, the Blackboard gradebook will show this adjustment in a column marked "Drop Lowest."

Academic Honesty:

You may work with other students on the offline homework questions, but you cannot copy their work. Make sure that all work submitted is your own, so that you would be able to fully explain it to me or redo a similar problem if asked. Uploading the materials from this class to Chegg or other cheating websites or using any solutions that are posted there would violate the UM Standards of Honesty. Consequences for academic dishonesty depend on the seriousness of the offense and may include a grade of F.

University Classroom Health Requirements:

- Students are expected to comply with the University's protocols when they are in effect. Currently, a mask requirement is in place for vaccinated and unvaccinated people. As a result, proper mask wearing is required indoors and in the classroom. Current protocols can be found at https://coronavirus.olemiss.edu/.
- Students who have a diagnosed health concern that interferes with the wearing of face masks may contact the Student Disabilities Services (SDS) Office to seek a University-approved accommodation. Please contact SDS at https://sds.olemiss.edu/ for more information.
- If students test positive for COVID-19 at any health care facility, they must contact the Student Health Center at 662-915-7274. University Health Services will coordinate contact tracing to lessen the likelihood of spread.
- Students with COVID-19 should seek medical attention at the Student Health Center and contact their instructor to let them know that they will be missing class due to a health-related issue.
- If you are exposed to someone with COVID-19, you should contact the Student Health Center to get tested three to five days following exposure and follow the guidance recommended by the Health Center. If you are not fully vaccinated, you should follow quarantine protocols found at https://coronavirus.olemiss.edu/students/.
- Currently, COVID-19 guidelines for the Fall 2021 semester include face masks for vaccinated and unvaccinated people inside University buildings; therefore, students should not be in classroom spaces when they are out of compliance with these guidelines unless they have an accommodation approved by Student Disability Services.
- The University's Academic Conduct and Discipline Policy states that "disorderly behavior that
 disrupts the academic environment violates the standard of fair access to the academic
 experience." Failure to adhere to health requirements during the COVID-19 emergency will be
 deemed as disruptive to the classroom and will be enforced following the Academic Conduct
 and Discipline procedures.
- If you need to isolate due to contracting the coronavirus at any point this semester, you should
 do so, and email me as soon as possible. I will work with you to help you continue your
 progress in the course.

University-wide Policies:

Attendance

The university requires that all students have a verified attendance at least once during the first two weeks of the semester for each course. If your attendance is not verified, you will be dropped from the course and any financial aid will be adjusted accordingly. Please see http://olemiss.edu/gotoclass for more information.

Academic integrity and honesty

Students are expected to adhere to the University of Mississippi Creed and the Standards of Honesty as described in Policy Code ACA.AR.600.001 and the <u>M Book</u>. Students are reminded that cheating in any form will not be tolerated. Performance on all tests and assignments shall represent the individual work of the student. Those who violate the Standards of Honesty will be reported and subject to the appropriate sanction, which may include expulsion from the University.

Intellectual property

All materials distributed electronically and in hard copy in this class are protected under intellectual copyright. Any attempt to upload these documents to a file sharing service or to profit from their distribution by any means constitutes theft and will be in violation of intellectual property law and the UM Academic Conduct Code unless expressly permitted for by the instructor.

Nondiscrimination policy

The University complies with all applicable laws regarding affirmative action and equal opportunity in all its activities and programs and does not discriminate against anyone protected by law because of age, color, disability, national origin, race, religion, sex, sexual orientation, handicap, or status as a veteran or disabled veteran.

Disability Access and Inclusion

The University of Mississippi is committed to the creation of inclusive learning environments for all students. If there are aspects of the instruction or design of this course that result in barriers to your full inclusion and participation, or to accurate assessment of your achievement, please contact the course instructor as soon as possible. Barriers may include, but are not necessarily limited to, timed exams and in-class assignments, difficulty with the acquisition of lecture content, inaccessible web content, and the use of non-captioned or non-transcribed video and audio files. If you are approved through SDS, you must log in to your Rebel Access portal to request approved accommodations. If you are not yet approved through SDS, you must contact Student Disability Services (at 662-915-7128 or sds@olemiss.edu) so the office can (i) determine your eligibility for accommodations, (ii) disseminate to your instructors a Faculty Notification Letter, (iii) facilitate the removal of barriers, and (iv) ensure you have equal access to the same opportunities for success that are available to all students.

Examinations and last week of class

Regulations governing all examinations — A student's failure to appear for an examination without an acceptable excuse, inability to present valid identification, absence from the room during the course of an examination without the consent of the examiner, or attempting any portion of an examination without submitting his or her answers shall result in failure of the examination. Tardiness beyond 15 minutes forfeits a student's right to an examination.

Final examinations — A final examination, to be given at the time posted in the examination schedule, is required in each undergraduate course, unless the appropriate chair and dean have approved an exception. A student who has three or four final examinations in one day may arrange with the course

instructor to take the noon or 7:30 p.m. examination at another time. In order to give a final examination at any time other than that shown in the posted examination schedule, an instructor must have prior approval of the department chair and dean.

Last week of class — The following guidelines exist to allow sufficient time for students and instructors to prepare for final examinations. These guidelines apply to the week preceding final examinations for undergraduate courses held during Fall and Spring semesters.

During the period of Wednesday through Friday of the last week of class, instructors are not to give exams, tests, or quizzes that contribute more than 10% of the final grade for a class. An instructor can obtain approval of the department chair and dean to give an exam, test, or quiz, of this weight, during this three day period. Instructors should return graded work and/or inform students of their grades on exams, tests, or quizzes prior to the beginning of finals week. Exceptions to the above statement are automatically made for lab-based courses, technical writing courses, seminar courses that assign a term paper, and senior design courses that assign a multi-faceted project in lieu of a final exam. Major projects of the above types, which contribute more than 10% of the final grade and which are due during this Last Week period, should be assigned in the syllabus at the beginning of the semester and any substantial change in the assignment should be made known to students before the drop deadline.

Reading Schedule: Please read these sections in the textbook <u>before</u> class each day.

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1	1.1 - 1.8		1.9 - 1.10		1.10
8/23 - 8/27	Syllabus				
Week 2	2.1 - 2.2		2.3		2.4
8/30 - 9/3					Online 1, Offline 1, 2 due
Week 3	Labor Day		3.1-3.2		3.3
9/6 – 9/10	No class				Online 2, Offline 3, 4 due
Week 4	4.1-4.3		4.4	Exam 1 1-3	4.5
9/13 – 9/17					Online 3, Offline 5, 6 due
Week 5	4.6		4.7		5.1-5.2
9/20 - 9/24					Online 4, Offline 7, 8 due
Week 6	5.3-5.4		5.5-5.6		5.7-5.8
9/27 - 10/1					Online 5, Offline 9, 10 due
Week 7	6.1 - 6.2		6.3	Exam 2 4-5	7.1 - 7.2
10/4 - 10/8					Online 6, Offline 11, 12 due
Week 8	7.3 - 7.4		7.5		8.1 - 8.2
10/11- 10/15					Online 7, Offline 13, 14 due
Week 9	8.3 - 8.4		8.5		8.6
10/18- 10/22					Online 8, Offline 15, 16 due
Week 10	Overflow		9.1 - 9.2	Exam 3 6-8	9.3
10/25- 10/29					Online 9, Offline 17, 18 due
Week 11	9.4		9.5		9.6 - 9.9
11/1 - 11/5					Online 10, Offline 19, 20 due
Week 12	13.1 - 13.2		13.3	13.4 - 13.6	13.4 - 13.6
11/8- 11/12					Online 11, Offline 21, 22 due
Week 13	13.7 - 13.11		14.1 - 14.2	Exam 4 9, 13	14.3 - 14.5
11/15- 11/19					Online 12, Offline 23, 24 due
Break Week	No class	No class	No class	Нарру	No class
11/22- 11/26				Thanksgiving!	
Week 14	14.6 - 14.7		14.11-14.13		Overflow
11/29 – 12/3					
Finals Week			213-1 Final		213-2 Final
12/6 - 12/10			W 12:00		F 4:00