

PHY2060, Enriched General Physics I (Fall 2018)

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Text: University Physics, 14th ed., by Young & Freedman, with Mastering Physics Homework.

Mastering Physics course ID: MPPONOMAREVA92232

A Mastering Physics **access code** should be part of the textbook package you select.

(<http://MasteringPhysics.com>)

Class: TR 12:30pm-1:45pm, ISA 4010

Office Hours: TR 2:00pm-3:00pm and by appointment.

Course Outline and Objectives

The course aims to promote a deeper understanding of traditional topics: Mechanics and Waves & Acoustics. These topics are structured into seven sections: Mechanics I-VI & Waves/Acoustics. The main ideas are understood and re-enforced by developing conceptual problem-solving skills. This is critical for the success with the course; therefore, problems will be assigned for each section (seven homeworks in total). These problems will be due at the beginning of the first lecture of the next section (see tentative schedule). The problems are assigned and graded through MasteringPhysics. However, students must have a hard copy of the entire homework that is clearly organized and shows all the work. Occasionally, the hard copy will be collected and graded. An online homework will not be credited if hard copy is missing. Students must carefully study all examples considered in the textbook and in class. In addition, there will be a quiz after each section that emphasizes basic concepts of the material learned (seven quizzes in total). The quiz may contain a problem and/or conceptual question. I will give exact dates for these quizzes about one week in advance. In studying for the quizzes and examinations you are encouraged to work on problems in the book in addition to those assigned. Please read the text before each lecture. Although I will not require attendance, it is paramount that you come to every lecture in order to keep up with the work. Please come see me during office hours if you have missed a lecture to get 'up to speed' on the course work. The students are advised to bring textbook to every class.

Prerequisites: Calculus I (MAC 2311 or MAC 2281) with minimum grade of 'B'.

Corequisite: PHY 2048L.

Course Grading Breakout	Homework Problems	20 %
	Quizzes (best 5 out of 7)	20 %
	Mid-term Exam	30 %
	Final	30 %

Extra points will be offered for attendance*

* To qualify for extra credit for attendance students must attend 22 out of 27 classes excluding the Midterm. The extra credit will be in the form of grade increment. For example, if student earns A- and qualifies for extra credit, the final grade will be A.

Course Grading

93.00 – 100.00	A
90.00 – 92.99	A-
87.00 – 89.99	B+
83.00 – 86.99	B
80.00 – 82.99	B-
77.00 – 79.99	C+
73.00 – 76.99	C
70.00 – 72.99	C-
67.00 – 69.99	D+
63.00 – 66.99	D
60.00 – 62.99	D-
0.00 – 59.99	F

Tentative Schedule and Examination Dates

Week Beginning	Topics (Chapters in Text)
Aug 19	Mechanics I: Basics of Motion (1-3)
Aug 26	
Sept 2	Mechanics II: Newton's Laws (4-5), Quiz 1 + HW 1 (1-3) on Tue Sep 4
Sept 9	
Sept 16	Mechanics III: Work, Energy & Momentum (6-8), Quiz 2 + HW 2 (4-5) on Tue Sep 18
Sept 23	
Sept 30	Mechanics IV: Rotation (9-10), Quiz 3 + HW 3 (6-8) on Tue Oct 2
Oct 7	Quiz 4 + HW 4 (9-10) + MIDTERM (1-10) on Thurs Oct 11
Oct 14	Mechanics V: Elasticity & Fluid Mechanics (11-12)
Oct 21	
Oct 28	Mechanics VI: Gravitation & Periodic Motion (13-14), Quiz 5+HW 5(11-12) on Tue Oct 30
Nov 4	
Nov 11	Waves/Acoustics (15-16), Quiz 6+HW 6(13-14) on Tue Nov 13
Nov 18	
Nov 25	
Dec 2	Quiz 7 (15-16) + HW 7 + FINAL (11-16) on Thu Dec 6, 10:00 am – 12:00 Noon

NOTE

Students who anticipate being absent from exams due to a major religious observance must provide notice of the date(s) and event(s) to the instructor, in writing, by the second class meeting. Notes and Tapes are not permitted for purposes of sale.

Any student with a disability is encouraged to meet with me privately during the first week of class to discuss accommodations. Each student must bring a current Memorandum of Accommodations from the Office of Student Disability Services (974-4309, SVC1133) which is prerequisite for receiving accommodations. Accommodated examinations through the Office of Student Disability Services require at least two weeks notice.