

PHY 121 - University Physics I: Mechanics
FALL 2010
Instructor: Igor A. Shovkovy

Days: Monday, Wednesday, Friday
Time: 10:45 a.m. – 11:35 a.m.
Location: Peralta Hall 309 (Poly)
(Poly – PRLTA309)

[Blackboard](#)



[MasteringPhysics](#)

My **office** is Wanner Hall **340J**
My office **telephone** number is **480-727-1953**
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Office hours: Mon 9:00 – 10:00 a.m., Wed 9:00 – 10:00 a.m., and by appointment.

Course description: This course is about the fundamental laws of physics that focuses on mechanics. Key topics to be covered in the course are kinematics (the description of motion) and dynamics (the relation of motion to force and mass), Newton's laws, work, energy, momentum, conservation laws.

Prerequisites: MAT-265 (Calculus for Engineers I), MAT-270 (Calculus with Analytic Geometry I), or MAT 290 (Calculus I). Students will need to be able to apply algebra, trigonometry, and elementary differential and integral calculus to solve physics problems.



Textbook: *University Physics* (12th edition) by H. D. Young and R. A. Freedman

You may use either the expanded edition or Volume 1 only. Homework reading assignments are keyed to this textbook. At the bookstore, the textbook should come packaged with a [Mastering Physics](#) access kit. [Mastering Physics](#) is required. If you buy a used textbook, then you must buy Mastering Physics separately at the bookstore or online at the [Mastering Physics web site](#).

General policy: Class attendance is required. An extra credit (up to a maximum of 3%) may be earned for the attendance. Students are responsible for all material presented in class, all homework, and for all changes to the schedule or plans announced in class. Minimal preparation for lecture is to do the reading assignment for that day. Reading assignments for each class is given in the [SCHEDULE of Lectures, Exams, and Homework assignments](#) on the Blackboard course web site.

Electronic devices. The use of cell phones, pagers, personal digital assistants (PDAs), iPods, iPads, laptops, and other similar electronic devices is **not** permitted during lectures, recitations, exams and quizzes.

Grading policy:

Homework	30%
Midterm tests	50%
Final exam	20%
TOTAL	100%

The grades will be determined as follows:

A (88-100 %), **B** (75-87.9 %), **C** (62-74.9 %), **D** (50-61.9 %), **F** (<50 %)

Homework. Homework is one of the most important components in this course. This is because doing homework is the only way to really learn the material and build a good intuition for physics. Solving physics problems effectively is a skill that students must develop. The only known way to achieve this is by practicing. The lectures will only cover the key concepts. The text will elaborate on these concepts and provide further explanation of their meaning and on how one uses them to solve problems. There is no way to do well in this course if you do not give the homework assignments the effort they require.

Your homework assignments are to be completed using [Mastering Physics](#) (MP). (For tips using Mastering Physics see the notes in the [SCHEDULE](#) file on the Blackboard course web site.) You will have approximately 12 Mastering Physics HW assignments per semester. You can only find the Mastering Physics problems at masteringphysics.com. The due dates for all Mastering Physics assignments will be posted on your Mastering Physics assignment list.

Midterm exams. There will be four midterm tests on the dates shown below in the tentative schedule (see also the [SCHEDULE of Lectures, Exams, and Homework assignments](#) on the Blackboard course web site). Textbooks and notes will **not** be permitted during the exams.

Final Exam. A comprehensive [final exam](#) is *tentatively* scheduled on **December 13, 2009** (Monday), **9:50 a.m. – 11:40 a.m.** Textbooks and notes will **not** be permitted during the final exam.

Tentative schedule

The exact schedule for lectures and tests will depend on how long it takes to cover the material. The following is my best guess.

Dates

August 20	First class
September 6	Labor Day – no class
September 15	Test #1
October 11	Test #2
October 29	Test #3
November 24	Test #4
November 26	Thanksgiving – no class
December 6	Last class
	FINAL EXAM, see http://students.asu.edu/final-exam-schedule

Selected course materials, handouts, and grades can be obtained from [myASUcourses](#). The course name at [myASUcourses](#) is **PHY 121: Univ Physics I: Mechanics (2010 Fall)**.

The identification code for our class at [MasteringPhysics](#) is **MPSHOVKOVY2010FALL**

For student rights and responsibilities see the ASU web page: <http://campus.asu.edu/downtown/rights-and-responsibilities>

ADA policy: *ASU provides equal opportunity to qualified employees and students, and to members of the general public who have a disability and provides reasonable accommodation as appropriate in employment, the application for employment, services, programs, and activities. Individuals with a disability are those who have a physical or mental impairment that substantially limits one or more major life activity, have a record of such impairment, or are regarded as having such impairment. ADA coordinator must be contacted for assistance in all matters pertaining to compliance with this policy. The Disability Resource Center contact numbers are 480-965-1234 (Voice), 480-965-9000 (TTY).*

Last modified August 16, 2010