PHY 121 - UNIVERSITY PHYSICS I: MECHANICS	Days:	Monday, Wednesday, Friday
FALL 2011	Time:	10:45 a.m. – 11:35 a.m.
INSTRUCTOR: IGOR A. SHOVKOVY	Location:	Peralta Hall 302 (Poly – PRLTA314)
<b>RECITATION</b> Instructor: Ghada Elaqad	Day:	Wednesday
	Time:	12:55 p.m. – 1:45 p.m.
	Location:	Peralta Hall 314 (Poly – PRLTA314)

http://shovkovy.faculty.asu.edu/syllabus/2011/Fall/2011 Phy121 Mechanics.htm

Dischard My office telephone number is 490,727,4052	
• <u>Blackboard</u> inly once telephone number is 480-727-1953	
<u>MasteringPhysics</u> My e-mail address is lgor.Shovkovy@asu.edu	
• <u>Schedule</u> <b>Office hours:</b> Mon, 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: <u>University Physics (13<sup>th</sup> edition) by H. D. Young and R. A. Freedman</u>

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 <u>Mastering</u> <u>Physics</u> access kit.

<u>Mastering Physics</u> is required. If you buy a used textbook, then you must buy Mastering Physics separately at the bookstore or online at the <u>Mastering Physics web site</u>.

**General policy:** Class attendance is required. An extra credit (up to a maximum of 2%) 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 <u>SCHEDULE of Lectures, Exams, and Homework assignments</u> 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 exams and quizzes. **Grading policy:** 

Homework	25%
Recitation	10%
Midterm tests	45%
Final exam	20%
TOTAL	100%

The grades will be determined as follows: A (90%-100%), B (78%-89.99%), C (66%-77.99%), D (54%-65.99%), E (less than 54%) **Recitations.** Attendance of recitations is required. During the recitation sessions you will be able to ask questions and to develop critical problem solving skills. The recitation instructor will determine your recitation score based on short quizzes given during the semester.

**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 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 without giving the homework assignments the effort they require.

Your homework assignment are to be completed using <u>Mastering Physics</u>. (For tips using Mastering Physics see the notes in the <u>SCHEDULE</u> file on the Blackboard course web site.) There will be 12 Mastering Physics homework assignments. You can only find the Mastering Physics problems at <u>masteringphysics.com</u>. 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 <u>SCHEDULE of Lectures, Exams, and Homework assignments</u> on the Blackboard course web site). Textbooks and notes will **not** be permitted during the exams.

**Final Exam.** A **comprehensive** final exam is scheduled during the final exam week (December 8 - 14, 2011). For details see the <u>final exam schedule</u>. No changes may be made in this schedule without prior approval by the Dean of the college. Textbooks and notes will **not** be permitted during the final exam.

## Tentative schedule

August 19	First class
September 5	Labor Day – no class
September 23	Test #1
October 12	Test #2
October 31	Test #3
November 11	Veterans Day – no class
November 25	Thanksgiving Day – no class
November 28	Test #4
December 5	Last class
FINAL EXAM:	Check the ASU final exam schedule for the date and time

Selected course materials, handouts, and grades can be obtained from <u>myASUcourses</u>. The course name at <u>myASUcourses</u> is **PHY 121: Univ Physics I: Mechanics (2011 Fall).** The identification code for our class at <u>MasteringPhysics</u> is **MPSHOVKOVY2011FALL** 

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 18, 2011