http://shovkovy.faculty.asu.edu/syllabus/2014/Spring/2014_Phy121_Mechanics.htm

PHY 121 - University Physics I: Mechanics **SPRING 2014** Instructor: **Igor A. Shovkovy**	Days: Tuesday, Thursday Time: 9:00 a.m. – 10:15 a.m. Location: Picacho Hall 150 (PICHO 150)

Blackboard **MasteringPhysics**	**Office**: Wanner Hall **340L** (Polytechnic campus) Office **telephone** number: **480-727-1953** **E-mail** address: **Igor.Shovkovy@asu.edu** **Office hours:** Tue, Thu 10:30 a.m. – 11:30 a.m., and by appointment.

Course description: This course is about the fundamental laws of physics that focuses on mechanics. Topics to be covered in the course include kinematics and dynamics of linear motion and rotations, conservation laws (energy, momentum and angular momentum), universal gravitation and various applications of mechanics.

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, as well as **differential and integral calculus** to solve physics problems.

Textbook: ***University Physics*** **(13th 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 prepackaged with a Mastering Physics access kit. Mastering Physics is **required** from the very beginning of the course. 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, smartphones and other similar electronic devices is **not** permitted during lectures and exams.

Grading policy:

Homework	35%
Recitation	15%
Midterm exams (10%+10%+10%)	30%
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 classroom participation and short quizzes given during the semester.

Homework. Homework is one of the most important components in this course. The main purpose of homework assignments is to help you to **practically** learn the material and build a solid understanding of physics concepts. Solving physics problems effectively is a skill that you must develop by the end of the course. Lectures will cover the key concepts, but homework will help you to learn them. Reading the

textbook is essential for deeper understanding of the main concepts and problem solving techniques used. In order to do well in this course, it is necessary to do all homework and reading assignments.

Your homework assignment are to be completed using Mastering Physics (MP). (For tips using Mastering Physics see the notes in the SCHEDULE of Lectures, Exams, and Homework assignments file on the Blackboard course web site.) You will have 12 Mastering Physics homework assignments. You can find these assignments only at Mastering Physics (masteringphysics.com). The due dates for all Mastering Physics assignments will be posted on your Mastering Physics assignment list.

Tests and final exam. There will be **three tests** during the semester on the dates shown in the tentative schedule below (see also the SCHEDULE of Lectures, Exams, and Homework assignments on Blackboard) and a **comprehensive final exam** on a date set by the University. For the actual date see the University final exam schedule at https://students.asu.edu/final-exam-schedule. No changes may be made in the final exam schedule. Textbooks and notes will **not** be permitted during the tests and the final exam. No makeup exams will be allowed.

Tentative schedule

Dates	
January 14	First class
February 13	Test #1
March 9 - 16	Spring Break - No classes
April 1	Test #2
April 29	Test #3
May 1	Last class
May 8	**FINAL EXAM,** see https://students.asu.edu/final-exam-schedule

---

Selected course materials, handouts, and grades will be posted on Blackboard (https://myasucourses.asu.edu).
The Blackboard course name is **PHY 121: Univ Physics I: Mechanics (2014 Spring)**
The MasteringPhysics *Course ID* is **MPSHOVKOVY2014Spring**

For student **rights and responsibilities** see: http://campus.asu.edu/downtown/rights-and-responsibilities

Workload Expectations: *The Arizona Board of Regents, the governing board for ASU, NAU, and the U of A, has a policy for how much time students should invest in their courses: "At least 15 contact hours of recitation, lecture, discussion, testing or evaluation, seminar, or colloquium, as well as a minimum of 30 hours of student homework is required for each unit of credit" (http://azregents.asu.edu/rrc/Policy Manual/2-224-Academic Credit.pdf). Therefore, in a 3-credit course, students should expect to invest 45 hours in class meetings (or the online equivalent), as well as 90 hours doing homework and assignments—a total of 135 hours in any given session (A, B, or C). In this course and in other courses in your degree program, your faculty are committed to this standard because it promotes the breadth and depth of learning required in a first-rate university education. As you register for courses, keep this 135-hour standard in mind because during some semesters your work and/or family commitments may prevent you from taking a full load of classes.*

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).*

Academic Integrity: *Academic honesty is expected of all students in all examinations, papers, laboratory work, academic transactions and records. The possible sanctions include, but are not limited to, appropriate grade penalties, course failure (indicated on the transcript as a grade of E), course failure due to academic dishonesty (indicated on the transcript as a grade of XE), loss of registration privileges, disqualification and dismissal. For more information, see http://provost.asu.edu/academicintegrity.*

This course is offered by the *School of Letters and Sciences*. For more information about the school, visit our website: https://sls.asu.edu/. If you have questions or concerns, please send your inquiry to sls@asu.edu.

Last modified January 10, 2014