

PHY 121 - University Physics I: Mechanics FALL 2016 Instructor: Igor A. Shovkovy	Days: Tuesday, Thursday
	Time: 12:00 p.m. – 1:15 p.m.
	Location: AGBC 154 (Poly)

Blackboard	Office: Wanner Hall 340L (Polytechnic campus)
MasteringPhysics	Office phone number: 480-727-1953
	E-mail address: Igor.Shovkovyasu.edu
	Office hours: Mon, Wed 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, Volume 1* (14th edition) by H. D. Young and R. A. Freedman

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: Attendance of all lectures is required. 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. Absences will be excused only upon presentation of documentation of compelling circumstances. Only University authorized travel (supported by appropriate documentation) can be excused.

Recitations. Attendance of recitations is *required* and you have to attend at least 60% of all recitations in order to be eligible to take the final exam. 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**.

There will be 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 as well as in the *SCHEDULE of Lectures, Exams, and Homework assignments*. The [MasteringPhysics](#) Course ID is **SHOVKOVY2016FALL**

Clickers. Attendance and participation will be recorded via **QT Clickers**. QT clickers and Turning Account license can be purchased at the ASU Sun Devil Campus Stores or on the Turning Technologies Online Store. (Note: ResponseWare will **not** be allowed.) You must register your clicker at Blackboard before **11:59 am on 08/23/16**. (To register your TurningPoint Device through Blackboard, choose our course, click “Communication” and choose “Turning Account Registration”.) For help and support see <https://ucc.asu.edu/clickers/students/>.

When answering clicker questions in class, you will receive 2 points for correct answers, 1 point for wrong answers, and zero points for no response. You are responsible for bringing your Clicker to class for every lecture. If you forget your clicker you will NOT get any clicker points for that lecture irrespective of what kind of excuse you may have. You may NOT use someone else’s clicker. If you do, you will not get any points for this.

Electronic devices. The use of phones, iPads, iPods, and other similar electronic devices is **not** permitted during lectures, tests and exams. The use of laptops is allowed during lectures only for the purpose of taking notes. Text messaging, browsing Internet, placing/receiving calls, emails, etc. during class is prohibited. You will be asked to leave the class for this type of disruptive behavior.

Tests & 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. Textbooks and notes will NOT be permitted during the tests and the final exam. (Only calculators and a single “Letter” size sheet of formulas will be allowed during tests and final exam.) NOTE: If the date of any test has to be changed (which is highly unlikely), the change will be announced in class and via Blackboard at least a week in advance. No changes may be made in the final exam schedule. No makeup exams will be allowed.

Grading policy:

Mastering Physics Homework	20 %
Clicker points	20 %
Recitations	10 %
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%)

Tentative schedule

Dates	
August 18	First class
September 20	Test #1 (Chapters 1, 2, 3, 4)
October 11	Fall Break - No classes
October 27	Test #2 (Chapters 5, 6, 7, 8)
November 29	Test #3 (Chapters 9, 10, 13, 14)
December 6	FINAL EXAM (12:10 p.m. – 2:00 p.m.) https://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 (2016 Fall)**.

The identification code for our class at [MasteringPhysics](#) is **SHOVKOVY2016FALL**

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 *College of Integrative Sciences and Arts*. For more information about the college, visit our website: <http://cisa.asu.edu/>. If you have questions or concerns, please send your inquiry to cisa@asu.edu.

Last modified August 9, 2016