

BASIC COURSE INFORMATION FOR PHYSICS COURSES TAUGHT BY RANDY HALL

For all courses but PHY 1025: The course consists of a lecture part and a lab part bundled into one four hour course. There are usually four or five exams and a final exam, which is comprehensive. There are no makeup exams allowed, but a student is allowed to miss one exam without penalty. If a student takes all the exams, the lowest one is dropped and used as extra credit (up to 5 points) on the final exam. Roll is taken each class session and the course adheres to the attendance policy of the College of Arts and Sciences.

PHY 1025 – Finding Success in Physics: This is a pass/fail New Student Experience course for freshmen physics/astronomy/astrophysics majors. The course contains the New Student Experience topics as prescribed by the University and a collection of useful mathematical topics to aid students in solving physics problems.

PHY 1407 – Sound and Acoustics: This is a very basic physics course concerning the physics of sound. The topics include nature of sound, basics of acoustical engineering, functions of human speech and hearing, and the physics of music. A textbook is required, but the laboratory materials are posted online (Canvas). It is helpful, but not necessary, to be able to read music and have some familiarity with musical scales. A brief tutorial is provided in class for those with no musical experience. There is some mathematics involved, but the problems to be worked require no more than basic algebra skills. Logarithms are used in the course, but, since a calculator (basic scientific; graphing calculator not required) is allowed for exams, logarithms can be evaluated using the technology. Exams count 50%, the final exam 25%, and homework 10% of the final grade. The laboratory grade counts 15% and must be a passing grade in order to pass the course.

PHY 1420 – General Physics I: This course is a calculus based first semester physics course. A student should be at least enrolled in Calculus I but the calculus used in the course is very basic, so unfamiliarity with calculus should not be a detriment to success in the course. A textbook, an experimental lab manual, and a set of theory lab manuals are required, as is online access to the Mastering Physics homework entry system. This means that purchase of a used textbook will likely require an additional purchase for the online access. Each student should have a scientific calculator to perform computations for homework and on exams but a graphing calculator is not required. PHY 1420 has, in addition to an experimental laboratory, a theory lab section that each student must attend weekly. These sessions are designed to increase critical thinking skills through qualitative analysis of conceptual problems. In other words, it's designed to help a student learn to think like a physicist in order to be able to successfully attack conceptual and quantitative problems. The theory lab section grade counts 10% of the final grade. Exams count 50%, the final exam 25%, and homework 5% of the final grade. The experimental laboratory grade counts 10% and must be a passing grade in order to pass the course.