

## Advanced Placement in Physics

Students who receive a score of 4 or 5 on the Physics 1 exam will receive one unit of AP credit. Students taking the Physics C Mechanics exam or Physics C Electricity and Magnetism exam will receive 1 unit of credit each for a score of 4 or 5. Students with AP Physics credit should plan on Physics 114 or Physics 200 as their first course and should consult the department chair to determine which is the best placement for them. Students who have taken IB, A-levels, or another advanced high school physics course should take our placement exam, to be administered in the afternoon on the first day of classes in the fall semester; the exact time and locations will be listed in the orientation schedule. Additional placement issues should be addressed by consulting with the department during departmental advising during orientation. Students who have any questions over the summer about placement may contact Professor Jenny Magnes ([jemagnes@vassar.edu](mailto:jemagnes@vassar.edu)) prior to selecting courses.

**Dates:** Monday, 28 August 2023, 3 pm

**Location:** Sanders Physics

## INTRODUCTORY PHYSICS COURSES

### PHYS 111 - Introduction to Physics I

Semester Offered: Fall

An introduction to the basic concepts of physics with emphasis on mechanics. Not calculus-based. Recommended for Pre-Health students and life science majors. The Department.

Two 75-minute periods and one 3-hour laboratory.

### PHYS 112 - Introduction to Physics II/Lab

Semester Offered: Spring

Fundamentals of electricity, magnetism, and optics. Not calculus-based. Pre-Health students and life science majors. The Department.

Prerequisite(s): [PHYS 111](#) or [PHYS 113](#) or AP credit.

Two 75-minute periods and one 3-hour laboratory.

### PHYS 113 - Fundamentals of Physics I/Lab

Semester Offered: Fall

An introduction to the basic concepts of physics with emphasis on mechanics. Calculus-based. Recommended for potential majors in physics and other physical sciences. The Department. Two 75-minute periods and one 3-hour laboratory.

### PHYS 114 - Fundamentals of Physics II/Lab

Semester Offered: Spring (and 1 section in the fall for advanced first-years)

Fundamentals of electricity, magnetism, and optics. Calculus-based. Recommended for potential majors in physics and other physical sciences. The Department.

Prerequisite(s): [PHYS 111](#) or [PHYS 113](#) or AP Credit; or equivalent.

Two 75-minute periods and one 3-hour laboratory.

## Introductory Physics Course Sequence Offered for 2021-2022

**PHYS 111/112** are **non-calculus**-based introductions to physics that will be ideal for students on Vassar's pre health track. It will cover more topics than **PHYS 113/114**, including fluids and thermodynamics, but will not spend as much time on mathematics.

Who is recommended for **PHYS 111/112**? - Pre-health students, science majors who do not anticipate taking any advanced physics courses like the 200 or 300 level physics or physical chemistry courses, or students who want a physics course with a laboratory but do not want to have to worry about how long it's been since they've taken calculus.

Who is recommended for **PHYS 113/114**? - Physics majors, Astronomy majors, Chemistry majors, Math/Stats majors, students considering the Dartmouth engineering program, or any student considering taking 200 or 300 level physics or physical chemistry courses.