

## Pathways to first-year physics at Wesleyan

Choosing a first-semester physics course can be a challenge. It is difficult to know how the physics and mathematics courses you took in high school relate to our curriculum. This document is designed to help you navigate the possibilities to make a decision that will work well for you.

The first thing to consider is whether you have taken calculus before arriving at Wesleyan. If you have not, the choice is simple: PHYS111, Introduction to Physics I, is the course for you. Please note that this course does not provide an entry into the major. However, dedicated students who have not taken physics before have taken PHYS111, along with calculus, their first year and started the major in their sophomore year.

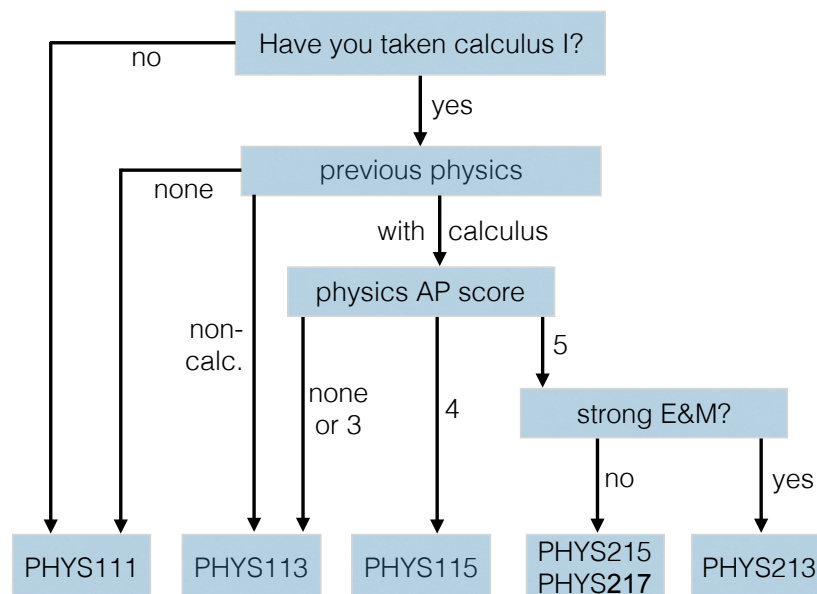
The first physics course for most students is PHYS113, General Physics I. A previous physics course, along with a year of high school calculus or the equivalent, is a prerequisite for this course. Students taking PHYS113 also need to continue their calculus education with an appropriate math course. The math placement exam can help you choose the correct option.

If you have taken the Physics AP exam, we have a bit of additional information to use. If you scored a 4 on the exam, you should consider enrolling in PHYS115, a new course we have designed for students who want a faster-paced experience with additional material to stimulate their physics interest.

A score of 5 on the Physics AP exam means you might consider skipping introductory mechanics altogether. The Physics Department offers advanced placement credit for those with this score. If you do skip mechanics, there is a further consideration: if your background in electricity and magnetism is equally strong, and you have a strong mathematics background as well, you should consider beginning with PHYS213, Waves & Oscillations. This is our sophomore-level introduction to mathematical physics.

Most students who skip introductory mechanics, however, are not ready for a sophomore physics course. Those students are encouraged to take one or both of our half-credit fall courses, designed specifically for students with a good mechanics background. In 2016-17, these courses will be PHYS215, Special Relativity, and PHYS217, Chaos.

The flowchart below summarizes this information to help you navigate the options efficiently. It is meant for guidance only; feel free to discuss your particular situation with a member of the physics department.



Finally, consider taking our optional laboratory courses. PHYS121 is designed to complement PHYS111, and PHYS123 goes with PHYS113.