

## 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, PHYS111, *Introduction to Physics I*, is likely the course for you. This course does not provide an entry into the physics major. If you are considering majoring in physics, 3-2 (or 2-1-1-1) engineering, or another major that requires calculus based introductory physics, but have not previously studied calculus, you should talk with a physics faculty member.

The first physics course for most students at Wesleyan 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. The Physics Department offers advanced placement credit for those with a score of 4 or 5, however, we recommend that prospective majors only consider skipping introductory mechanics with a 5. If this is the case, and you are confident that your background in electricity and magnetism is equally strong, and you also have a strong mathematics background as well, you may consider beginning with PHYS213, *Waves & Oscillations*. This is our sophomore-level introduction to mathematical physics.

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

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 any member of the physics department.

