Use the links in the red bar above to navigate to other syllabus sections.

This syllabus provides practical information about the course. Review the Course Orientation pages first to understand the course philosophy. This page summarizes basic course information.

Course content summary:

- **AP50a** (Fall semester): Kinematics, mechanics, waves.
- **AP50b** (Spring semester): Electromagnetism and optics.

Course components:

- Reading
- Readiness assurance
- Tutorial
- Challenge
- Skills Session
- Projects

Prerequisites:

- **For AP50a**:
  - **Physics**: None required; no prior high-school or college physics needed.
  - **Math**: Single-variable calculus at the level of Mathematics 1b (can be taken concurrently). You should be comfortable with basic derivatives and integrals.
- **For AP50b**:
  - **Physics:** AP50a or equivalent.
  - **Math**: Multivariable calculus at the level of Mathematics 21a (can be taken concurrently). You should be comfortable with basic vector calculus, including line and surface integrals.

Materials: All teaching materials, project materials, and platform subscriptions are provided free of charge. There are **no additional costs**.

Lectures: None! Learning happens individually (asynchronously) and with your team, either during class periods with the instructors and other members of the teaching team, or any other times that work for the team.

Class sections: Tu/Th 9:45 am to 12:30 pm ET.

- This 2-period time slot is divided between curricular activities and project-related activities.
  - **Curricular activities:** Tutorial on Tuesdays and a Challenge on Thursdays.
  - **Project activities:** Skill sessions (developing relevant skills), and unprogrammed project work under teaching team guidance.
- **No additional scheduled class activities, sections, or labs**.

Location: Science and Engineering Complex at 150 Western Avenue, Allston:

- Curricular activities (tutorial/challenge): Room LL2.229
- Skills sessions: Room LL2.223
- Project work: Active Learning Labs (A.L.L.), Room 1.114

Examinations: None. See Assessment.

Enrolling: Enrollment is capped due to lab occupancy limits. Register by adding the course to your Crimson Cart on my.harvard, and include a comment on your previous physics courses and why you want to take AP50. (Those who complete AP50a will get priority enrolling in AP50b.)