MASS ACADEMY ADVANCED PLACEMENT PHILOSOPHY

CURRICULUM: At Mass Academy, the junior year curriculum in Physics and Computer Science is intentionally aligned with the AP standards. However, Mass Academy does not submit our curricula for an AP audit to be labeled an Advanced Placement course because our courses go beyond the AP curriculum to cover other topics that we find valuable, innovative, and critical to the Mass Academy mission. We embrace flexibility in our curriculum.

REASON: College admissions officers typically do not evaluate AP scores for admission purposes and instead look at a student's transcript along with other factors like SAT/ACT scores, essays, and recommendations. Mass Academy does not offer AP courses and therefore, for college admissions purposes, our junior year courses are considered the highest level offered by the school. Seniors take all university-level courses which are at a higher level than AP courses.

Students interested in taking AP tests for other purposes (scholarship opportunities, credit, advanced academic standing) should check the AP credit policies at the universities to which they are applying. Each university has a different policy for awarding credit. Additionally, courses that award college credit, including WPI courses, generally achieve the same goal as scoring 4 or 5 on an AP exam.

Mass Academy Physics - AP Testing History and Philosophy

For many years the Mass Academy physics course covered most of the same topics on the AP Physics exam although not necessarily in a sequence aligned with the AP testing timeline. After a years-long research project in physics education, a new sequence of topics was piloted. Around this same time Mass Academy changed its schedule format and the College Board separated AP Physics B into AP-1 and AP-2. This combination of changes meant the Mass Academy physics curriculum was now naturally 90% aligned with the AP Physics timeline. Consequently, there was a significant increase in the number of students who chose to take the AP test with the understanding they had to self-study topics not yet covered in class. To reduce the additional workload and stress for these students, a minor change was made in the sequence to make the Academy physics course 100% aligned with the AP Physics timelines. Although the course is aligned to AP Physics 1, and AP Physics C, these tests are NOT required. In recent years, approximately one-third of our students have taken AP-1, one-third have taken AP-C, and one-third did not take any AP Physics test.

Mass Academy Computer Science - AP Testing History and Philosophy

The Mass Academy computer science curriculum consists of several content areas including web technologies, fundamental concepts of object-oriented methodologies through the widely-used Java programming language, mobile application development, and participation in the American Computer Science League contest. The AP Computer Science A exam covers only fundamentals of object-oriented programming in Java. The Mass Academy computer science course is approximately 95% aligned to the content of the AP Computer Science A exam. Additional self-study and exam preparation are recommended for students planning to take the AP Computer Science A exam at the end of junior year. The test is not a required component of the course.

Academy Mathematics –AP Calculus Philosophy

If students wish to take the AP Calculus exam to qualify for the advanced math sequence, they should register to take the Calculus AB or Calculus BC exam at the end of junior year. If students are interested in college credit or advanced academic standing, we suggest they wait until the end of senior year when they have completed the Calculus I-IV sequence at WPI. Some self-study will still be required since university-level calculus and the College Board AP exam are not 100% aligned. As always, students should check with individual universities about their credit transfer and AP credit policies.

Our Math Modeling course is not aligned with the AP Calculus course and is not designed nor intended to prepare students to take the AP Calculus AB or BC exam.

AP TESTING AT MASS ACADEMY: Mass Academy offers AP Physics and AP Computer Science exams since they are aligned with the Mass Academy curriculum. Participation in these exams is not a requirement of any course. Mass Academy emphasizes project based and applied learning, and our courses are not designated AP courses by the College Board. However, students who have performed well in Mass Academy coursework in computer science and physics should be well prepared, with some additional self-study, to take the AP Physics and AP Computer Science exams. For the purposes outlined above, we will also offer the Calculus AB and Calculus BC exams at Mass Academy.