



FREQUENTLY ASKED QUESTIONS – SCIENCE

How do I decide which course to take as a freshman?

A student's first science course may be either a *life science* (*Biology*) or a *physical science* (*Environmental Geoscience* or *Physics PCB*). The decision should reflect a student's *personal interests* and *strengths*, and it should take into account the recommendations and counsel of the student's junior high school science teacher and adviser.

Which subjects in science interest me the most?

Students perform best in classes that interest them. Biology, Environmental Geoscience, and Physics PCB are all fascinating subjects that help us look at the world and universe in new ways. Read the description for each course in the [Program of Studies](#). Perhaps the subjects and topics covered in one of the courses sound especially appealing to you. Maybe you have already studied the material in one of these courses in your 7th or 8th grade classes and you want to try something new. Or maybe you have found a previous course so interesting that you want to expand your knowledge in that area.

What strengths will I bring to my science class?

Students perform well in classes where there is a good match between strengths and the skills required to understand the concepts taught in the course. Physics is a quantitative science in which equations and mathematical relationships are important in understanding the concepts taught in the class. Students entering Physics should have strong math skills and they must have completed Algebra-1 and have been accepted and enrolled in 3-level Geometry, 4-level Geometry, or 4-level Algebra-2.

Biology and Environmental Geoscience are descriptive sciences. While problem solving and other higher level thinking skills are also emphasized in these classes, the concepts presented generally do not require rigorous mathematical analysis. Rather these courses emphasize reading and writing skills.

What is the PCB sequence?

PCB is a 3-year interconnected sequence wherein students take Physics PCB, then Chemistry PCB, and finally Biology PCB. The sequence has been structured so that concepts taught in one class can be applied to the later class. This sequence provides students and teachers with an opportunity to make more specific connections between courses than would otherwise be possible in other Physics, Chemistry, and Biology courses.

If I am placed in a 3-level or 9-level course freshman year, can I still go to 4-level or Advanced Placement classes in the future?

Yes. After freshman year, level placement in Chemistry and Physics is dependent upon your math level, while placement in Biology and Environmental Geoscience is dependent upon your English level. If you successfully complete 4-level mathematics as a freshman, you may register for 4-level Chemistry or Physics PCB sophomore year. Further, registration for Advanced Placement classes is contingent on a student successfully completing the prerequisites for the specific Advanced Placement course. Students who meet the necessary prerequisites must also consider their overall course load, time commitments, and interest level. See the [Program of Studies](#) or department website for more details on specific course requirements for each Advanced Placement Science course.