



BHS COURSE COMPARISON GUIDE

PHYSICAL SCIENCE & HONORS BIOLOGY

Science

General Descriptions

Physical Science

This course provides a fundamental understanding of interrelationships between matter and energy. The course content establishes and supports a strong foundation for all future science courses and supports their general understanding as more informed consumers of science in their everyday lives.

This course incorporates frequent laboratory activities that emphasize learning basic lab techniques, data collection, data analysis, and laboratory safety. Reading, writing and math skills learned in previous courses are utilized and further developed. Basic concepts of chemistry and physics will be introduced.

Honors Biology

This course focuses on the content of biology at the level of organization of molecules. Honors Biology uses more chemistry to understand the biological processes, then Regular Biology. Honors Biology covers the same topics and labs as Regular Biology, but goes into more detail, using level thinking skills and more independent work, to develop a deeper understanding.

Biological themes include evolution, science and society, behavior, regulation and homeostasis, genetic continuity of life, classification, and science as inquiry. A variety of laboratory experiments are included throughout the year, with dissection of a preserved vertebrate specimen. Students learn basic measurement principles and mathematical techniques that are used in problem solving and lab work. A summer review packet is required.

Physical Science students who traditionally perform well in the class...

- ♦ complete their assigned homework
- ♦ ask questions and invest time preparing for tests and quizzes for at least 2-3 days leading up to the test/quiz date.
- ♦ perform better in a more guided environment / setting
- ♦ benefit from more time in class to cover course topics and review materials with his/her peers and the teacher.
- ♦ are also planning to take a regular / standard level of math (typically Algebra I) during the same academic year.

Honors Biology students also...

- ♦ accept greater responsibility to seek out additional help outside of class without teacher prompting (as needed)
- ♦ are typically more independent and already possess strengths in being a 'self-starter'
- ♦ have already started to develop a strong ability to apply and synthesis material (as oppose to memorization)
- ♦ are prepared to apply material from the assigned reading within the class setting on the follow day (s).
- ♦ possess advanced math skills / understanding (due to the enhanced Science track for students who begin with Honors Biology)

From a student's perspective...

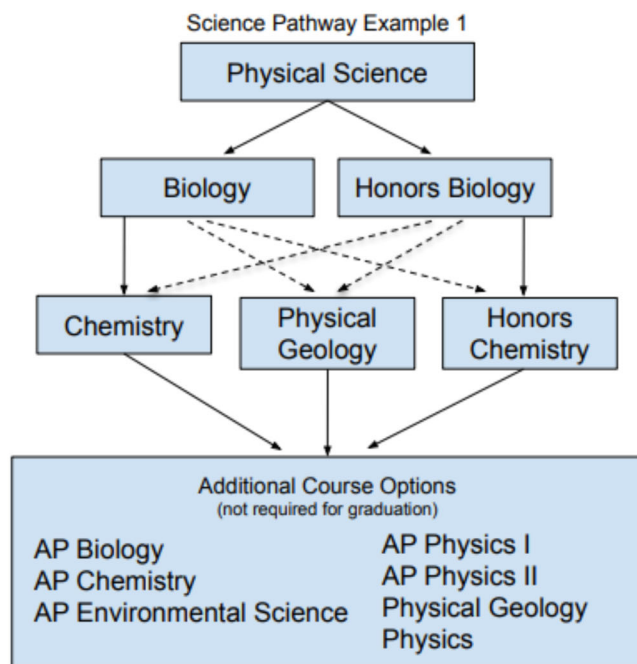
'We (as students) for some reason have this idea that if I take Physical Science then I won't have the option to follow the 'honors track' for Science; which isn't true. Physical Science helps students prepare for Biology and Chemistry and if you take Physical Science, you can always take Honors Biology, Honors Chemistry and any AP science courses as a senior.' - Bexley Student (Junior)

SCIENCE REQUIREMENTS & COURSE PROGRESSIONS

Science Requirements for Graduation

Students are required to complete 3.0 science units as part of meeting the overall graduation requirements. The units must include one unit of physical sciences, one unit of life sciences and one unit of advanced study in one or more of the following: chemistry, physics or other physical science; advanced biology or other life science. Additionally, courses such as astronomy, physical geology or other earth / space sciences may be used to meet the advanced study requirement

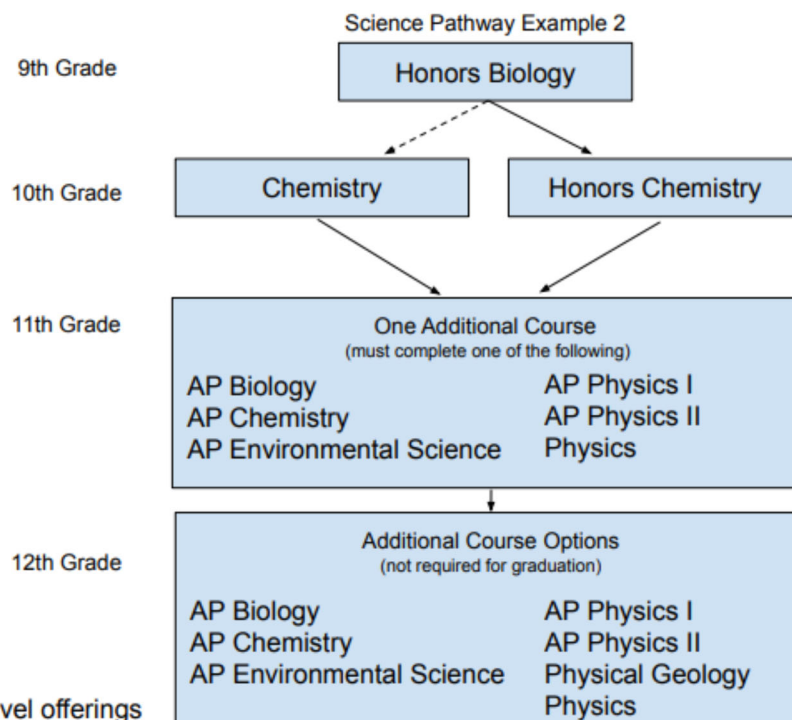
****NOTE:** students who enroll in Honors Biology as a freshmen cannot 'go back' and take the Physical Science class as part of meeting the physical science graduation requirements. Students starting in Honors Biology will complete two advanced study courses as part of meeting the graduation requirements.



* See prerequisite guidelines for all advanced course-level offerings

** Solid arrows reflect recommended pathways and dashed arrows reflect additional pathway options (students are encouraged to discuss course options and pathways with their science teacher(s) as needed)

*** Students may 'double up' by electing to enroll in two science courses during the same academic year (refer to course prerequisites when evaluating options)



Something important to consider when making your decision...

Keep in mind these are two completely different classes, textbooks, etc. Should you start in one class and move to the other during the first semester, students will need to catch up on the content he/she has missed up until that point due to differences in the curriculum, concepts, etc.