



BHS COURSE COMPARISON GUIDE

PHYSICAL SCIENCE & HONORS BIOLOGY

Science

Course 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.

The 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. Additionally, basic concepts of chemistry and physics will be introduced.

Physical Science students who traditionally perform well...

- ◆ 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

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. Students take the OST End of Course text for Biology for Graduation credit.

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...

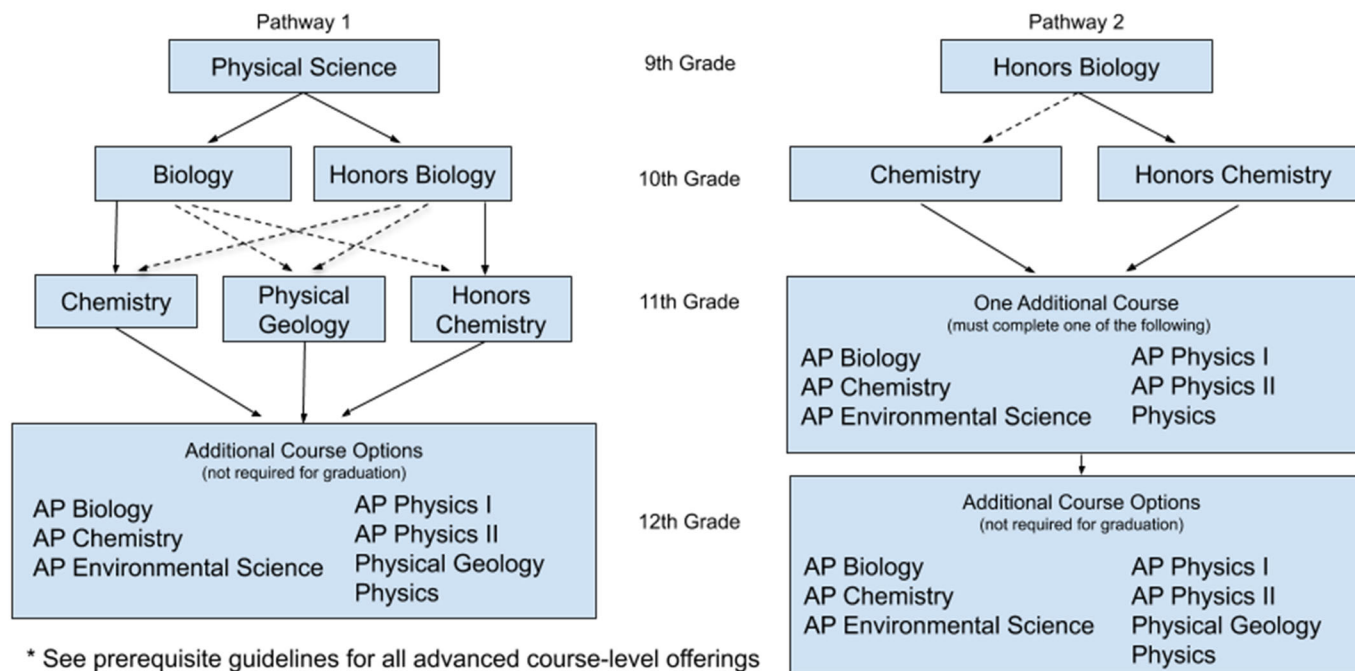
'We (as students) for some reason have this idea that if I take Physical Science then I won't have the option to follow the 'honors track' for Science; which isn't true. Physical Science helps students prepare for Biology and Chemistry and if you take Physical Science, you can always take Honors Biology,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

SCIENCE REQUIREMENTS & COURSE PROGRESSION

Science Requirements for Graduation

Three credits of science are required for graduation and 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 a Physical Science class as part of meeting their graduation requirements. Students starting in Honors Biology are required to complete two advanced study courses as part of meeting the graduation requirements.



Something Important to Consider When Making Your Science Course Request

Please take into consideration, Physical Science and H. Biology are two completely different courses. Should a student begin in one course and request to level change to the other at any point during the first semester, the student will be responsible for learning all of the content covered to-date in preparation for future assessments and/or end of course testing.