

## **Brookline High School**

Science Department 115 Greenough Street Brookline, MA 02445 (617) 713-5365

## Chemistry Course Selection

Physics teachers will be meeting with students, with the help of their fellow Chemistry teachers, to help them understand the differences between the various Chemistry courses. They will also give one-on-one recommendations when appropriate. In the mean time, here are Chemistry teachers' words on how to choose a course:

<u>Chemistry 1</u> is a content-based, introductory Chemistry course in which students learn material through direct instruction and activities that are the foundation of learning. Students learn about a wide range of topics within Chemistry; while many of these topics overlap with those on Chemistry I Honor, Chemistry I Standard does not delve into the details of the same topics, or with as much algebra as other courses.

**Homework** in Chemistry I Standard consists of both guided reading, with key questions, and independent readingand-note-taking. Homework involves analyzing lab results, as well as reviewing content taught in the classroom. **The students** in Chemistry I Standard often need more structure, or have not yet completed Algebra 1.

<u>Chemistry I Honor</u> is a fast-paced, intense introductory Chemistry course based around lecture, discussions, and laboratory experiments across a wide-range of content.

**Homework** in Chemistry I Honor consists of reading and problem solving from the text that supplement and guide their class work, as well as completing inquiry-based labs and activities.

The students in Chemistry I Honor are comfortable learning independently through reading, are well organized, and are ready for a challenge. Students interested in eventually enrolling in AP Chemistry should consider Chemistry I Honor as the best preparation since the content areas are covered in this course, slightly more than in the other Chemistry courses. Further, Chemistry I Honor is the introductory course that most prepares students for the SAT II Subject Test in Chemistry. However, to be prepared fully for this exam, students need to independently review and learn some additional material, and therefore are encouraged to take AP Chemistry if this is their goal.

**SWS Students** have the option of taking an SWS section of Chemistry I Honor, which is the same course, simply populated with SWS students.

<u>Chemistry 1 LBC Honor</u> is an honors level inquiry-based introductory Chemistry course. LBC stands for "Living By Chemistry," which is an innovative curriculum from University of California at Berkeley. While students may learn through lecture, the bulk of the learning experience occurs through exploration. Students have opportunities to ask questions among peers and the teacher, make scientific observations, collected evidence, and formulate scientific hypotheses and explanations. In each lesson, students discover concepts and communicate ideas. Formal definitions and formulas are frequently introduced *after* students have explored, scrutinized, and developed a concept, providing for more effective instruction.

**Homework** in Chemistry LBC Honor involves reading, writing responses to class activities, solving problems and answering follow-up questions from experiments.

**The students** in Chemistry LBC Honor are active learners; they love to learn by *doing*. Students work in groups, as collaboration is a large piece of the learning experience. Because of this, any student who is not comfortable working with peers should not enroll in Chemistry LBC Honor. Also, students must be enrolled in Algebra 2.

## Other pathways

- Summer school is not the best option for students hoping to accelerate, and must consult me before considering any summer school course.
- Simultaneously taking another science course as a 10<sup>th</sup> grade student is not necessary, and it would not accelerate a student who is very interested in science. This is because many students have successfully taken AP Chemistry concurrently with Biology in 11<sup>th</sup> grade.

If you have any questions, feel free to contact me.

Sincerely,
Ed Wiser
Curriculum Coordinator for Science