



# Brookline High School

Science Department

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## ***Biology Course Selection***

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

**Biology I** is a rigorous college preparatory Biology course for students who want a solid foundation in Introductory Biology. Students learn material primarily through lecture/discussion, and participate in labs and activities that further emphasize or expand on lecture material. Students learn about a wide range of topics within Biology; while many of these topics overlap with those on *Biology I Honor*, *Biology I* moves at a more moderate pace and does not delve into as much depth.

**Homework** in *Biology I* consists of both guided reading, with key questions, and independent reading-and-note-taking. Homework also involves analyzing lab results, as well as reviewing content taught in the classroom.

**Biology I Honor** is a fast-paced, intense introductory Biology course based around lecture and discussion of a wide-range of content.

**Homework** in *Biology I Honor* consists of reading and taking notes from the text that supplements and guides their class lecture notes, as well as completing inquiry-based labs and activities.

**The students** in *Biology I Honor* are comfortable learning independently through reading, are well organized, and are ready for a challenge. Students interested in enrolling in *AP Biology* or *AP Environmental Science*, will need *Biology I Honor* to satisfy the expectations of those courses. Further, *Biology I Honor* is the introductory course that most prepares students for the SAT II Subject Test in Biology M (Molecular). However, to be prepared fully for this exam, students need to independently review and learn some additional material outside of class.

**Investigative Biology I Honor** is a discovery-based introductory Biology course, formerly known as *BSCS Biology I Honor*. Its abbreviated name is *iBio*. While students may learn through lecture, the bulk of the learning experience occurs through exploration. *iBio* can be taken for standard credit. Students elect early in the course to earn honor or standard credit; honor students complete extra assignments, read articles, and answer more challenging test questions, while participating in a heterogeneous classroom environment.

**Homework** in *iBio* involves reading, writing responses to class activities, and answering lab follow-up questions.

**The students** in *iBio* are active learners; they learn by *doing*. Students work in groups, as group collaboration is a large piece of the learning experience. Because of this, students with attendance issues or who are not comfortable working with peers should not enroll in *iBio*. This course does not specifically address material for the SAT II Subject Tests in Biology, but students have been successful on the SAT II Subject Test in Biology E (Ecology) with this course, although they need to independently review and learn additional material outside of class.

**Additional Courses** are possible, only with consultation from guidance counselors and teachers. It is common for students to also enroll in an optional course, but students need to plan their entire schedule and their plans for graduation before this extra course can be requested. **Instructions for this process are on the back of this letter.**

**Summer school** is *not* the best option for students hoping to accelerate through coursework, and must consult me before considering any summer school course. If a student is passionate about science, engineering, or related fields, they should consider exploring options other than a Biology course over the summer.

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

Sincerely,

Ed Wisner

Curriculum Coordinator for Science

## ***11<sup>th</sup> Grade Optional Science Course Selection***

Additional Courses are possible to schedule, only with consultation from guidance counselors and teachers. They will help students create a balanced schedule, which is a top priority. BHS Students have a wide range of courses available to them after they complete Physics, Chemistry and Biology. However, it is not uncommon for students to enroll in an optional course in addition to Biology in 11<sup>th</sup> grade. Students need to consider their entire 11<sup>th</sup> and 12<sup>th</sup> grade schedules and credit requirements, before this additional course can be requested. For instance, **elective credits** need to be fulfilled and **US History** is an 11<sup>th</sup> grade graduation requirement that cannot be deferred.

Some years, juniors have been able to take spaces in courses that are not completely filled by seniors. And AP Chemistry has been a popular course with many juniors who can balance it in addition to Biology and other classes. However, this is not a guarantee of placement into an additional course and alternates should be considered and entered into the student portal by the student.

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### **Instructions for this process are as follows:**

1. Student hears a presentation from current teacher in February
  2. Student considers how this will fit in their 11<sup>th</sup> and 12<sup>th</sup> grade schedules
  3. Student goes to Guidance Counselor for a consultation
  4. Student obtains form and signature from Guidance Counselor
  5. Student returns the form to their teacher to sign and collect by March 1<sup>st</sup> to have the the course request entered by March 3<sup>rd</sup>, when the student portal opens.
  6. Student enters alternate course requests for the additional course (with any course in the catalog) once the student portal opens. This is scheduled for March 3<sup>rd</sup>.
  7. Final deadline is March 10<sup>th</sup>.
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### **All optional courses and their availability for 11<sup>th</sup> grade students.**

Note: there are possible exceptions, but these are realistic guidelines based on available seats.

#### **Possible for 11<sup>th</sup> Graders**

**SC4140** AP Physics 1&2  
**SC4240** AP Chemistry  
**SC5020/30** Astronomy/Astronomy H  
**SC5530** Eng By Dsgn – *encouraged for 11<sup>th</sup> graders*

**SC5650** Materials Science (*pending funding*)

#### **Semester Courses**

**SC1300** Drawing For Understanding in Field Science – *available for all grades*  
**SC5820/30** Forensic Science/Forensic Science H  
**SC5920/30** Genetics/Genetics H

#### **Possible only for 11<sup>th</sup> grade students who move to BHS, and have finished Biology**

**SC4320/30** Anatomy & Physiology/Anatomy & Physiology H

**SC4430** Biomedical Science H

**SC4520/30** Environmental Science & Society/Environmental Science & Society H

**SC/SO4570** Climate Science and Social Change (*pending funding*)

**SC5130** Body/Mind H

**SC5620/30** Marine Biology/Marine Biology H

#### **Not possible for BHS 11<sup>th</sup> graders**

**SC4141** AP Physics C – only for 11<sup>th</sup> graders, with Calculus

**SC4440** AP Biology

**SC4540** AP Environmental Science

**SC5600** Eng Innovation and Design H