

### **Course Sequence Recommendations**

#### **For Students Considering the Chemical and Physical Biology Concentration**

Ordinarily, students should plan on enrolling in two science courses per semester in the freshman and sophomore years as follows:

First Semester	Second Semester	Third Semester	Fourth Semester
Life Sciences 1a or LPS A <sup>†</sup>	Life Sciences 1b	MCB 52	MCB 54
Math (according to math placement <sup>**</sup> )	Physical Sciences 1	Chem 17	Chem 27

- Freshmen should enroll in Life Sciences 1a (fall semester) and Life Sciences 1b (spring semester) as well as math (according to preparation and placement scores).
- Ordinarily, freshmen take Physical Sciences 1 in the spring semester; however, students with an exceptionally strong chemistry background may instead begin with organic chemistry, and may take either the Chem 17/27 sequence (which begins in the fall term) or the Chem 20/30 sequence (which begins in the spring term). Students considering beginning with organic chemistry are strongly encouraged to consult with the Co-Director of Undergraduate Studies in Chemistry, Dr. Gregg Tucci.
- In the third semester, students ordinarily enroll in molecular biology (MCB 52) and organic chemistry (Chem 17). Students with an exceptionally strong chemistry background who took Chem 20 in the spring of their first year typically enroll in MCB 52 and Chem 30 in their third semester.
- † Students with little or no background in biology and/or chemistry may begin their studies with Life and Physical Sciences A (LPS A) and math in their first semester. Ordinarily, these students will then enroll in LS 1b and PS 1 in the second semester, followed by LS 1a in the third semester. We recommend meeting with a Life Sciences Concentration Advisor to discuss subsequent course planning.
- \*\* In their first two years, students enroll in mathematics courses according to their preparation and placement scores. Concentrators in Chemical and Physical Biology must complete either Math 19a and 19b, Math 21a and 21b, or Applied Math 21a and 21b. Math 1b (Calculus) or the equivalent is required for each of these courses.

This suggested course sequence also fulfills requirements for students who decide to concentrate in Chemistry, Molecular and Cellular Biology, Neurobiology, or Organismic and Evolutionary Biology. Visit [Lifescience.fas.harvard.edu](http://Lifescience.fas.harvard.edu) or click [here](#) for more information about the Chemical and Physical Biology concentration.

**Freshmen interested in studying the Life Sciences should take the on-line Life Sciences and Chemistry placement exams.**

**If you have any additional questions about the Life Sciences, please contact a [Concentration Advisor](#).**