

**Course Sequence Recommendations
For Students Considering Molecular and Cellular Biology**

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 Life and Physical Sciences A	Life Sciences 1b	MCB 60	MCB 64, 65 or 68
Math (according to math placement*)	Physical Sciences 1 or Physical Sciences 11	Chem 17	Concentration Elective

- Freshmen should enroll in Life Sciences 1a or LPS A (fall semester, according to placement) and Life Sciences 1b (spring semester) as well as math (according to preparation and placement scores). Alternatively, completing LS 50 is equivalent to LS1a, LS1b, Math 19a, and a research course (MCB 91).
- Ordinarily, freshmen take Physical Sciences 1 or Physical Sciences 11 in the spring semester; however, students with an exceptionally strong chemistry background may instead begin with organic chemistry. Freshmen considering enrolling in organic chemistry should consult with Dominic Mao and Greg Tucci.
- In the third semester, most MCB concentrators take MCB 60, which provides an integrated introduction to molecular, cellular and developmental biology with an emphasis on biological mechanisms and their frequent connections to medicine.
- In the third semester, students ordinarily enroll in 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 Chem 30 in their third semester.
- In the fourth semester, many MCB concentrators take a second intermediate course, chosen from MCB 64 (The Cell Biology of Human Life in the World), MCB 65 (Physical Biochemistry), or MCB 68 (Cell Biology Through the Microscope). MCB 63 (Biochemistry and Molecular Medicine), a fall course, is another option. MCB 63, 64, 65 and 68 do not require MCB 60 as a prerequisite.
- * MCB concentrators must either complete Mathematics 1b and either Mathematics 19a, Statistics 102 (or 110 or 111), or CS 50. Alternatively, students may demonstrate competency beyond Math 1b by taking Mathematics 19a (or higher) or an approved calculus-based statistics course (such as Statistics 110 or 111).

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

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