Molecular and Cellular Biology

***Note: This worksheet was created using information in the Handbook for Students and should be used for planning purposes only.***

**Basic Requirements (12-13 half courses):**

Life Sciences: LS1a (or LPSA) and LS1b

MCB 60

MCB 63, 64, 65 or 68

Chemistry: Phys Sci 1 (or equivalent) and either Chem 17 or 20

Mathematics: (see description of requirement below)

Physics: One half-course in mechanics (Phys Sci 2 or equiv.) and One half-course in electricity and magnetism (Phys Sci 3 or equiv.)

Two half-courses above the introductory level, including at least one MCB 100-level course. A list of courses that fulfill this requirement is posted here.

Research Experience: At least one semester of research (LS 100r, MCB 91r or MCB 99) or a summer research experience in an approved program. Click here for advising notes and a list of approved summer programs.

Additional concentration-eligible course (to bring total to at least 12 half courses)

**Tutorial:** Required of all concentrators in sophomore and junior years. Tutorial sessions are non-credit (and therefore do not appear on the study card or transcript). Click here to view a handout describing the history, goals and format of the tutorial program.

**Mathematics and computational skills:** 1-2 half-courses. According to a student’s preparation level, this requirement can be fulfilled in two ways. One path is to take Mathematics 1b and one of the following:

- Mathematics 19a or higher
- Statistics 102 (or 110 or 111 or an approved alternative)
- Computer science such as CS 50 or an approved alternative

An alternative path is to demonstrate competency beyond the Mathematics 1b level by taking:

- Mathematics 19a or higher or
- An approved calculus-based statistics course (such as Statistics 110 or 111)

**Requirements for Honors Eligibility (14-15 half courses):**

One additional half course in organic chemistry (Chem 27, 30, or equiv.)

One additional course above the introductory level

Thesis: Optional for Honors and High Honors. To be considered for highest honors, a thesis based on independent laboratory research is required. Students intending to write a thesis enroll in two terms of MCB 99 in their final year at the College. One term of MCB 99 counts toward the requirements for a research experience and the other term counts as one of the three upper-level courses required for honors eligibility.