

MOLECULAR & CELLULAR BIOLOGY MAJOR, B.S. – 2024-2025
PHARMACOLOGY EMPHASIS

To be admitted to full major status, students must fulfill the pre-biology course and grade-point average requirements as described in the General Catalog and Pre-Biological Sciences Major Sheet. At minimum, they must complete twelve designated courses from the Preparation for the Major with a 2.0 or higher UC grade-point average. Grades earned must meet grade prerequisites for the full major.

Notes: Hyphens indicate an entire sequence or combination must be completed as shown to fulfill an area requirement. A single course can satisfy only one requirement.

PREPARATION FOR THE MAJOR

UNITS TO COMPLETE

Chemistry 1A-B-C and 2AL-BL (or 1A-AL-B-BL-C-CL or 2A-AC-B-BC-C-CC)	15
MCDB 1A-B, EEMB 2-3, and MCDB 1LL and EEMB 2LL	17
Chemistry 6AL and 109A-B-C or 109AH-BH-CH.....	15
Mathematics 3A-B or 34A-B	8
One of the following: PSTAT 5A or PSTAT 5LS or Math 4A	4 or 5
Physics 6A-AL-B-BL-C-CL	12

UPPER-DIVISION MAJOR

48 upper division units required, distributed as follows 48

- I. A. Genetics: MCDB 101A-B 8
- B. Biochemistry: MCDB 108A-B 8
- C. Biochemistry-Computational & Systems Biology: MCDB 108C 4
- D. One Cell Biology course: MCDB 103, 131, or 135 4

- II. 1. Pharmacology: MCDB 126 and 126B 9
- 2. Pharmacology Lab: Select two: MCDB 126AL, 126BL, 3 units of either 197 or 199 7 or 8
- 3. Human Physiology: MCDB 111..... 4

III. Additional units within MCDB or from the following to bring the total upper-division units in the major to 48:
EEMB 111; Chemistry 141, 161, 162A, 162B; Psychology 115, 133, 134, 137, 162 3-4

Courses outside of MCDB will likely require additional prerequisites within their own departments.

NOTES: The following courses do not count toward upper-division major credit: MCDB 110, 183, 184, 194D, 194KF, 194MR.

In addition, no more than 8 units of the following courses combined will apply to the major: MCDB 185-199.

Students are encouraged to take MCDB 187 (Pharmacology Colloquium). It is recommended to take MCDB 111 and Writing 109ST (Writing for Sci.) prior to enrolling in MCDB 126-B-AL-BL.

Students cannot double major with the Bio B.A. or B.S. nor have more than one emphasis within MCDB.

MAJOR REGULATIONS

- PREREQUISITES Check the General Catalog for the prerequisites to all listed courses.
- P/NP GRADING OPTION Not allowed for major courses (prep or UD), including courses applied to the major from other departments, except up to 8 units of courses that do not allow letter grades.
- SUBSTITUTIONS In the major requirements permissible only by petition to the department chair and dean.
- G.P.A REQUIREMENTS At least 2.0 overall UC average in all upper-division major courses and all courses (Prep and UD) for the major.
- DOUBLE MAJORS With the approval of each department chairperson, up to a total of 8 units may be applied simultaneously to both UD majors.