

**BIOCHEMISTRY—MOLECULAR BIOLOGY MAJOR, B.S. – 2023-2024**

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.

**Note:** Hyphens indicate that an entire course sequence or combination must be completed as shown to fulfill an area requirement.

**PREPARATION FOR THE MAJOR**

**UNITS TO COMPLETE**

Chemistry 1A-AL-B-BL-C-CL (or 2A-AC-B-BC-C-CC).....	15
MCDB 1A-B, EEMB 2-3, MCDB 1LL and EEMB 2LL .....	16
Chemistry 6AL <u>and</u> 109A-B-C or 109AH-BH-CH .....	15
Math 3A-B <u>and</u> 4A <u>and</u> 6A .....	16
Physics 6A-AL-B-BL-C-CL .....	12

**UPPER-DIVISION MAJOR**

48 UD units required, distributed as follows: ..... 48

- A. Genetics: MCDB 101A-B .....
- B. Biochemistry: MCDB 108A (or W 108A) and 108B-C.....
- C. Biochemistry-Molecular Biology Lab: MCDB 109L or 140L .....
- D. Physical Chemistry: Chemistry 112A (recommended) or 113A; and MCDB 123 .....
- E. Electives: courses from the following list to bring the total UD units for the major to 48 .....

MCDB 101AH, 101BH, 101L, 103, 103L, 108AH, 111, 111H, 112, 112H, 112L, 118, 126, 126AL, 126B, 126BH, 126BL, 131, 131L, 132, 132L, 133, 133H, 133L, 134, 134H, 135, 135H, 138 (or W 138), 139, 139H, 145, 146, 151, 151H, 152, 152H, 153, 153H, 161L, 170, 172, 187, 188, 192, 197, 198, 199; Chemistry 141, 143, 145, 147, 161, 162A, 162B; Psychology 162

No more than 8 units of the following courses combined will apply to the major: MCDB 185-199.  
 BMSE may be accepted by petition only.

A minimum of 32 UD units must be completed through courses within the MCDB department.

**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.