REQUIREMENTS FOR THE BIOLOGICAL SCIENCES (BIS) MAJOR

In addition to adhering to the UC Merced and School of Natural Sciences requirements, the additional requirements that must be met to receive the B.S. in Biological Sciences at UC Merced are:

Biological Sciences Requirements (59-64 units): The Biological Sciences major consists of 16 courses (5 lower division and 11 upper division) designed to give all students a common foundation of core knowledge specific to the discipline.

**Lower Division Major Requirements**

- Contemporary Biology (BIS 1) .................4 units
- Principles of Organic Chemistry (CHEM 8) ........4 units
- Principles of Physical Chemistry (CHEM 10) ........4 units
- Mathematical Biology (MATH 30) or
  Calculus of a Single Variable II (MATH 22) ........4 units
- Introductory Physics II (PHYS 9) .................4 units

**Upper Division Major Requirements**

- Molecular Machinery of Life (BIS 100) ........4 units
- The Cell (BIS 110) ......................................4 units
- Genetics (BIS 140) ......................................4 units
- Evolution (BIS 141) ......................................4 units
- Mathematical Modeling for Biologists (BIS 180) .......4 units

**Additional Upper Division Courses**

- Research seminar (BIS 190) ......................1 unit
• Research Projects in Biological Sciences (BIS 195) . . . . . .1-6 units
• One non-biology science or engineering course . . . . . . .3-4 units

Upper Division - Emphasis Track
• One course with lab from emphasis track . . . . . . . . . . . . .5 units
• Two additional courses from emphasis track . . . . . . . . . . . . .8 units

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