



UC Irvine Biochemistry

Biochemistry and Molecular Biology, B.S.

Major Description

The major in Biochemistry and Molecular Biology is designed to provide a comprehensive background in this modern, conceptual understanding of biology. Its flexibility is designed to accommodate a wide variety of fields including development, gene expression, immunology, pathogenesis, disease, virology and evolution. It will provide the rigorous training necessary for successful entry into graduate and professional programs in the medical and biological sciences.

Starting Your Degree

Lower-Division Major Requirements in Biochemistry

From UC's perspective, community college is where you begin working on the first two years of your bachelor's degree. This includes taking lower-division coursework specifically related to your field of study that may be applied toward graduation in your major.

Listed below are the lower-division requirements for **Biochemistry and Molecular Biology, B.S.** that may be satisfied with approved community college courses unless otherwise noted. To find out which of these requirements are shared by other UC campuses, see the UC Statewide Transfer Preparation Path in Biochemistry.

- Biochemistry
- General Biology (full sequence for Biological Science majors)
- General Chemistry (full sequence)
- Organic Chemistry (full sequence)
- Calculus (full sequence) or Calculus (two quarters/one semester) and Statistics
- Calculus-based Physics (full sequence)

!!! IMPORTANT !!!

All of these requirements do not necessarily have to be completed **before** you transfer. See the next section of this path for what you must do to be competitive for admission.

FIND YOUR COURSES

Every course at your community college that can be used to meet any of the lower-division major requirements is listed at www.assist.org

Becoming Competitive for Admission to Biochemistry

Selection Requirements

Important information on selection requirements for admission to the major, including what this campus advises applicants to complete—and by when and with what GPA—is outlined below. It is important to note that meeting these requirements does not necessarily guarantee admission to the campus or major. Majors designated as “highly selective” receive many more qualified applicants than there are spaces available. The stronger your major preparation, the more competitive you will be for these slots.

- A **highly selective** major; you **must** have an overall GPA of 3.0 or higher. If you are interested in this major you should apply to Biological Sciences.
- To enter the Biological Sciences major, junior-level applicants with the highest grades overall and who satisfactorily complete course prerequisites will be given preference for admission. The Developmental and Cell Biology major is available to Biological Sciences majors generally one year after transfer and upon completion of course requirements.
- Prior to transfer, all applicants **must** complete General Chemistry (full sequence) with laboratory with a minimum grade of B in each course and General Biology (full sequence for Biological Science majors) with a minimum grade of C in each course.
- You are advised to complete as many lower-division major-preparation course as possible prior to transfer.

Satisfying General Education in Biochemistry

General Education Requirements

While all UC campuses urge you to focus on your lower-division major requirements while in community college, it is important to remember that general education (GE), or “breadth,” requirements for your bachelor’s degree may also be met with approved community college courses. In fact, some majors require completion of lower-division GE coursework as part of your preparation prior to transfer. The good news is you may be able to double-count some of your lower-division major coursework for related GE requirements.

The Intersegmental General Education Transfer Curriculum (IGETC) is a series of courses at California community colleges that students may complete to satisfy GE requirements. Certain students, however, may not be well served by following this GE option. Specific information about satisfying GE requirements as a Biochemistry and Molecular Biology major is listed below.

- You are advised to satisfy GE requirements with IGETC.

Related Majors

Preparation for the following majors may be similar to the Biochemistry and Molecular Biology major described above (consult the campus catalog and www.assist.org).

- Biological Science, B.S.
- Chemistry B.S. with Biochemistry Concentration
- Developmental and Cell Biology, B.S.
- Ecology and Evolutionary Biology, B.S.
- Genetics, B.S.
- Microbiology and Immunology, B.S.
- Neurobiology, B.S.
- Plant Biology, B.S.