UC CAMPUS-SPECIFIC TRANSFER PREPARATION PATH

UC Berkeley Cell Biology

Molecular and Cell Biology, B.A.

Major Description

The Molecular and Cell Biology major focuses on the study of molecular structures and processes of cellular life and their roles in the function, reproduction and development of living organisms. This agenda covers a broad range of specialized disciplines, such as biochemistry, microbiology, biophysics, molecular biology, genetics, cell physiology, cell anatomy, immunology and neurobiology. The types of living organisms from which the departmental faculty draws its working materials are as diverse as its disciplinary specializations, ranging from viruses and microbes through plants, roundworms, annelids, arthropods and mollusks to fish, amphibia and mammals. The Molecular and Cell Biology major differs from the Integrative Biology major in that it emphasizes the study of biology at the molecular, rather than at the organismic, level.

Starting Your Cell Biology Degree

Lower-Division Major Requirements in Cell Biology

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 **Molecular and Cell Biology, B.A.** 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 Cell Biology.

- General Biology (full sequence for Biological Science majors)
- General Chemistry (full sequence)
- Organic Chemistry (full sequence)
- Calculus (full sequence)
- Calculus-based Physics (two terms)

!!! 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**

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Becoming Competitive for Admission to Cell Biology

Selection Requirements

Important information on selection requirements for admission to the major, including what this campus advises applicants to complete, and by when, is outlined below. It is important to note that meeting these requirements does not necessarily guarantee admission to the campus or major. The stronger your major preparation, the more competitive you will be.

- Prior to transfer, you **must** complete all lower-division major-preparation requirements, with the exception of Calculus-based Physics. Although you are not required to complete Calculus-based Physics prior to transfer, it is recommended.
- The College of Letters and Science requirements (Reading and Composition, Foreign Language and Quantitative Reasoning) or IGETC, strength of academic preparation and GPA are the primary criteria for admission.
- By the end of the spring term preceding fall enrollment, you **must** complete either the College of Letters and Science requirements or IGETC, and as many lower-division major-preparation courses as possible.

Satisfying General Education in Cell Biology

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 Cell Biology major is listed below.

- You **must** satisfy GE/breadth requirements with either IGETC or the College of Letters and Science requirements (Reading and Composition, Quantitative Reasoning and Foreign Language) by the end of the spring term preceding fall enrollment.

Related Majors

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

- Chemical Biology, B.S.
- Genetics and Plant Biology, B.S.
- Microbial Biology, B.S.
- Molecular Environmental Biology, B.S.
- Molecular Toxicology, B.S.
- Integrative Biology, B.A.