



UC San Diego Cell Biology

Biochemistry and Cell Biology, B.S.

Major Description

The major in Biochemistry and Cell Biology is offered through the Division of Biological Sciences and is designed to provide students with the fundamental courses required for entry into a school of medicine or into post graduate training in a wide variety of areas of biological and biomedical sciences: biochemistry, biophysics, genetics, molecular biology, cell biology, developmental biology, microbiology, virology, human biology (physiology, metabolism, genetic disorders), cancer biology, pharmacology and others. The emphasis is on basic principles which help us understand those processes unique to living organisms at the molecular 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 **Biochemistry and Cell 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 Cell Biology.

- General Biology (full sequence for Biological Science majors)
- General Chemistry (full sequence)
- Organic Chemistry (full sequence)
- Calculus (full sequence)
- 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 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.

- You are **strongly** advised to complete as many lower-division major-preparation courses as possible prior to transfer. Doing so will help you move more efficiently toward graduation.
- You **must** complete the following courses (or equivalent) at the time of transfer: General Biology (sequence for Biological Science majors), General Chemistry (year sequence), Organic Chemistry (year sequence), Calculus (full sequence) and Calculus-based Physics (year sequence).
- UCSD admits transfer students to the Biology major of their choice.
- The Division of Biological Sciences requires students in all Biology majors to take one biology lab before the end of the sophomore year. You **must** petition UCSD's Division of Biological Sciences to have this course accepted. You are **strongly** encouraged to complete this requirement prior to transfer; if you do not meet the biology with laboratory requirement at the time of transfer, you may petition the division for an extension.

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.

- While completing your lower-division major-preparation courses, you are advised to work toward completion of IGETC or UCSD's GE requirements. If you are unable to complete IGETC prior to transfer, you are advised to satisfy as many UCSD GE requirements as possible. IGETC is accepted at John Muir, Earl Warren, Thurgood Marshall and Sixth colleges only. Students completing IGETC are welcomed at Eleanor Roosevelt and Revelle colleges; however, they must also fulfill the specific GE requirements of those colleges. At UCSD, all majors are available to students in each college, so students who choose IGETC will not be restricted in their choice of major.

Related Majors

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

- Biology, General, B.S.
- Biology, Human, B.S.
- Ecology, Behavior, and Evolution, B.S.
- Microbiology, B.S.
- Molecular Biology, B.S.
- Physiology and Neuroscience, B.S.