

# BIOLOGY 2.0 – ASSOCIATE IN SCIENCE DEGREE FOR TRANSFER

Top Code:

0401.00

The Associate in Science in Biology 2.0 for Transfer provides student with a foundation in the biological and physical sciences for upper division in course work in the biological sciences or related fields. The Associate in Science in Biology 2.0 for Transfer is designed to provide students a clear transfer pathway to the CSU within the biology major and the completion of baccalaureate degree, with guaranteed admission to a CSU to a similar major with junior standing, and the ability to complete their remaining requirements within 60 semester or 90 quarter units.

The biological sciences have a wide range of career choices available. Earning a degree in Biology is a starting point for careers in the biological sciences, biomedical sciences, biotechnology, environmental biology, agriculture and other related fields.

## Associate Degree for Transfer Requirements

- 60 semester or 90 quarter CSU-transferable units.
- Completion of the California General Education Transfer Curriculum (Cal-GETC); or students with rights to former general education patterns can complete California State University-General Education-Breadth pattern (CSU GE-Breadth) or the Intersegmental General Education Transfer Curriculum (IGETC-CSU) pattern.
- A minimum of 18 semester or 27 quarter units in the major or area of emphasis as determined by the community college district.
- Obtainment of a minimum grade point average (GPA) of 2.0.
- All courses in the major must be completed with a grade of "C" or better, or P if the course is graded on a P/NP basis.

PLEASE NOTE: The courses that universities and colleges require for transfer vary. *When selecting courses for transfer purposes, students should consult with an Academic Counselor to determine the particular transfer requirements of specific institutions.*

## Program Outcomes

- Create scientific presentations and/or papers based on the students' own novel experimental findings and research.
- Recognize biological problems, propose testable solutions, and implement those tests through diverse methods.
- Analyze and summarize data and to infer conclusions based on those data.
- Apply appropriate technological and computational tools to solve biological problems.
- Diagnose and classify biological diversity, and understand of the functions and interactions of the components of diversity in ecosystems.

## Associate in Science in Biology 2.0 for Transfer Degree

| Code                                                              | Title                                                             | Units          |
|-------------------------------------------------------------------|-------------------------------------------------------------------|----------------|
| <b>Required Core</b>                                              |                                                                   |                |
| BIOL 010A                                                         | CELLULAR BIOLOGY, GENETICS AND EVOLUTION                          | 5              |
| BIOL 010B                                                         | THE DIVERSITY OF LIFE ON EARTH: STRUCTURE, FUNCTION AND ECOLOGY   | 4              |
| CHEM 001A                                                         | GENERAL CHEMISTRY AND CHEMICAL ANALYSIS I                         | 5              |
| CHEM 001B                                                         | GENERAL CHEMISTRY AND CHEMICAL ANALYSIS II                        | 5              |
| MATH 005A                                                         | CALCULUS I: LATE TRANSCENDENTALS                                  | 3-5.5          |
|                                                                   | or MATH 005A: CALCULUS I: LATE TRANSCENDENTALS - EMBEDDED SUPPORT |                |
|                                                                   | or MATH 005A: CALCULUS I: LATE TRANSCENDENTALS - HONORS           |                |
|                                                                   | or MATH 006A: CALCULUS FOR LIFE SCIENCES I                        |                |
| <b>Required Subtotal</b>                                          |                                                                   | <b>22-24.5</b> |
| Cal-GETC <sup>1</sup>                                             |                                                                   | 34             |
| Transferable Electives (as needed to reach 60 transferable units) |                                                                   |                |
| <b>Degree Total</b>                                               |                                                                   | <b>60</b>      |

<sup>1</sup> Students with rights to former general education patterns are able to use the CSU GE or IGETC-CSU in lieu of Cal-GETC to complete the general education requirement of this degree. In addition, eligible students can opt for the IGETC for STEM or CSU GE for STEM, which results in two fewer courses than the traditional GE patterns. IGETC for STEM requires all courses in Areas 1, 2, and 5 of the traditional IGETC; one course in Area 3A; one course in Area 3B; and two courses in Area 4 from two different disciplines. CSU GE for STEM requires all courses in Areas A, B, and E of the traditional CSU GE; one course in Area C1; one course in Area C2; one course in Area D; and one course in Area F. Students should consult with an Academic Counselor to help determine which general education pattern to complete.

## General Education Requirements for the Associate in Science Degree for Transfer

- General Information (<https://curriculum.pasadena.edu/academic-programs-leading-degree-certificate/>)
- Cal-GETC (<https://curriculum.pasadena.edu/degree-certificate-requirements/#calgetctext>)
- Students with rights to the former general education patterns can complete IGETC-CSU or CSU GE in lieu of Cal-GETC. Students should consult with an Academic Counselor to determine which general education pattern to complete and may refer to an appropriate archived College Catalog (<https://curriculum.pasadena.edu/previous-catalogs/>) or [www.assist.org](http://www.assist.org) (<https://www.assist.org/>) for more information.