



CURRICULUM GUIDE 2017-2018

BIOLOGY FOR TRANSFER

Associate in Science in Biology for Transfer (ADT)

The Student Transfer Achievement Reform Act (Senate Bill 1440, now codified in California Education Code sections 66746-66749) guarantees admission to a California State University (CSU) campus for any community college student who completes an "associate degree for transfer," a newly established variation of the associate degrees traditionally offered at a California community college. The Associate in Science in Biology for Transfer is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major. In order to earn one of these degrees, students must complete 60 required semester units of CSU-transferable coursework with a minimum GPA of 2.0. Students are strongly advised to consult with a counselor prior to pursuit of this degree to ascertain campus-specific CSU requirements. Completion of the requirements for the Associate in Science in Biology for Transfer assists students in transferring to a CSU to pursue upper division study towards a bachelor's degree in Biology. This program provides a strong foundation in the life sciences as well as in the supporting sciences of chemistry, physics, and mathematics. Furthermore, the theoretical knowledge and laboratory skills acquired by students in this program will also enhance their success with obtaining entry-level jobs that require two years of college-level science and math.

Requirements for Associate in Science for Transfer Degree:

- Complete all Required Core, List A, and List B courses with a grade of C or better.
- Complete IGETC for STEM for CSU (Plan C) requirements. These requirements are specified in the Ohlone College catalog.
- Complete 60 CSU-transferable semester units.
- Complete a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum GPA of 2.0 is required for admission, some majors may require a higher GPA. Please consult with a counselor for more information.
- Complete 38 semester units in the Biology major.
- Complete at least 12 units at Ohlone College.

Student Learning Outcomes

- Demonstrate the correct operating procedures in the use of common lab equipment such as compound and dissecting microscopes, spectrophotometers, pH meter, electrophoresis gel apparatus, micropipetters, and centrifuges.
- Demonstrate an understanding of the scientific method through the performance of experiments and the subsequent analysis of the experimentally obtained data.
- Comply with common laboratory safety guidelines.
- Explain and evaluate the major scientific themes in biology, chemistry, and physics.
- Explain and evaluate the main concepts of modern evolutionary theory.

REQUIRED CORE

| | | |
|-----------|---|----------|
| BIOL-101A | Principles of Biology--Molecular and Cellular Biology | 5 |
| BIOL-101B | Principles of Biology--Organisms and Systems | <u>5</u> |
| | | 10 |

LIST A

| | | |
|-----------|---------------------------------|-----|
| CHEM-101A | General Chemistry | 5 |
| CHEM-101B | General Chemistry | 5 |
| MATH-101A | Calculus with Analytic Geometry | 5 |
| PHYS-120 | Introduction to Physics I AND | 4 |
| PHYS-121 | Introduction to Physics II OR | 4 |
| PHYS-140 | Mechanics AND | (4) |
| PHYS-141 | Electricity and Magnetism | (4) |
| | | 23 |

LIST B

| | | |
|-----------|-------------------|-----|
| BIOL-106 | Microbiology OR | 5 |
| CHEM-112A | Organic Chemistry | (5) |
| | | 5 |

Total Required Units: 38