

BIOLOGICAL SCIENCES, ASSOCIATE IN SCIENCE

The Associate in Science in Biological Sciences is designed for students intending to transfer to a 4-year institution. The curriculum also prepares students to work professionally in areas centered around biology. The curriculum includes a core of courses in the biological and physical sciences and mathematics. This major area is appropriate also for Pre-Dentistry, Pre-Medicine, Pre-Pharmacy, and Pre-Veterinary Medicine. Contact an MPC counselor for major preparation at specific institutions.

Learning Outcomes

Upon successful completion of the program, students will be able to:

- Apply principles of mathematics and physical sciences to laboratory practices and biological processes.
- Explain concepts and theories of molecular and cellular biology, and genetics.
- Compare the structure and physiological functions of organisms, their ecological relationships, and evolution.
- Use the scientific method to investigate phenomena in the natural world and use concepts, experiments, and/or theory to explain them.

Associate in Science Degree Major Requirements

Code	Title	Units
Required Core		
BIOL 21	Concepts in Biology I: Cells, Genetics and Organisms	5
BIOL 22	Concepts in Biology II: Diversity, Ecology, and Evolution	5
CHEM 1A	General Chemistry I	5
CHEM 1B	General Chemistry II	5
MATH 20A	Calculus with Analytic Geometry I	4
TOTAL MAJOR UNITS		24
Additional Requirements		36
Complete Competency Requirements, general education pattern (MPC General Education, CSU General Education, or IGETC), and electives, if needed, for a total of 60 degree-applicable units. ¹		
Total Units		60

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Please refer to the graduation requirements section of the Catalog for information about degree and certificate requirements including Reading and Writing, Mathematics, Information Competency, and General Education requirements.

The model sequence of coursework below is one pathway for students to complete the program. The information below is not an official educational plan. An MPC Counselor can assist you with creating a personalized education plan based on your academic, career, and personal goals. Visit MPC's Counseling website for more information about Counseling and up-to-date program requirements.

Suggested Course Sequence

Year 1		Units
Fall		
ENGL 1A or ENGL 1AE	College Composition or College Composition: Enhanced	3
LIBR 50	Introduction to Library and Research Skills	1
MATH 13	Pre-Calculus	5
MPC GE Area D (US-1 Course Recommended)		3
MPC GE Area E		3
Units		15
Spring		
MATH 20A	Calculus with Analytic Geometry I	4
MPC GE Area F (US-2 & 3 Course Recommended)		3
Electives (ENGL 2 Recommended)		3
Electives (BIOL 10, BIOL 13, or CHEM 2 Recommended)		4
Elective		1
Units		15
Year 2		
Fall		
BIOL 22	Concepts in Biology II: Diversity, Ecology, and Evolution	5
CHEM 1A	General Chemistry I	5
Electives (MATH 20B Recommended)		4
Units		14
Spring		
BIOL 21	Concepts in Biology I: Cells, Genetics and Organisms	5
CHEM 1B	General Chemistry II	5
MPC GE Area C		3
Electives (SPCH 1 or SPCH 2 Recommended)		3
Units		16
Total Units		60