

BIOLOGY (AS DEGREE S0652)

Natural Sciences Division Degree S0652

The A.S. Biology degree offers the student a flexible way to earn a Biology Associate degree. After completing a one-year general biology sequence, the student chooses one of three tracks, biodiversity, cell and molecular biology, or pre-health professions, and takes three additional courses in biology based on those interests. The biodiversity track is for students interested in ecology, field biology, zoology, botany, and similar fields. The cell and molecular biology track is for students interested in molecular biology, genetics, cell biology, and biochemistry. The pre-health professions track is for students interested in medicine, dentistry, and veterinary medicine. This degree may facilitate transfer to baccalaureate majors in biology, and in many cases may facilitate transfer to more specialized majors such as Botany, Ecology, Environmental Science, Genetics, Molecular biology, Microbiology, or Zoology. Students desiring transfer should see a counselor.

Required Courses

Course Prefix	Course Name	Units
BIOL 2	Plant and Animal Biology	4
BIOL 4	Biology for Majors	4
or BIOL 4H	Biology for Majors - Honors	
CHEM 50	General Chemistry I	5
or CHEM 50H	General Chemistry I - Honors	
CHEM 51	General Chemistry II	5
or CHEM 51H	General Chemistry II - Honors	
MATH 180	Calculus and Analytic Geometry I	4
Only required for Cell and Molecular Biology track		0-4
BIOL 8	Cell and Molecular Biology	
Required Electives		11
Biodiversity track electives		
BIOL 3	Ecology and Field Biology	
BIOL 20	Marine Biology	
BIOL 21	Marine Biology Laboratory	
BIOL 25	Conservation Biology	
BIOL 34	Fundamentals of Genetics	
BIOL 34L	Fundamentals of Genetics Laboratory	
BTNY 3	Plant Structures, Functions, and Diversity	
MICR 1	Principles of Microbiology	
MICR 22	Microbiology	
ZOOL 3	Fundamentals of Zoology	
OR		
Cell and Molecular Biology track electives		
BIOL 34	Fundamentals of Genetics	
BIOL 34L	Fundamentals of Genetics Laboratory	
CHEM 80	Organic Chemistry I	
CHEM 81	Organic Chemistry II	
MICR 1	Principles of Microbiology	
MICR 22	Microbiology	
MICR 26	Introduction to Immunology	
Or		
Pre-Health Professions track electives		
ANAT 35	Human Anatomy	
ANAT 36	Human Physiology	
ANAT 38	Pathophysiology	
BIOL 8	Cell and Molecular Biology	

BIOL 34	Fundamentals of Genetics
BIOL 34L	Fundamentals of Genetics Laboratory
MICR 1	Principles of Microbiology
MICR 22	Microbiology
Recommended Electives	
PHYS 2AG	General Physics
PHYS 2BG	General Physics
Or	
PHYS 6A	General Physics with Calculus
PHYS 6B	General Physics with Calculus
Total Units	33-37

Program Learning Outcomes

Review Student Learning Outcomes (SLOs) (<http://www.mtsac.edu/instruction/outcomes/sloinfo.html>) for this program.