Program Map 2018-2019 College Credit Catalog

Biology

Degree: Associate of Science (AS) in Biology

SCIENCE, ENGINEERING & MATH

Program Description: The Biology program at ACC prepares students who are Biological Sciences majors transferring to a university, transferring students completing their Natural Sciences core courses, Health Sciences students completing prerequisite courses, and students preparing to enter Biotech or other workforce or certificate programs.

To receive an Associate of Science degree in Biology, the student must (a) make a minimum grade of C in all required math and science courses, and (b) have an overall GPA of 2.0 or greater.

Contact:
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Department Website
sites.austincc.edu/biology

*Use this **Program MAP** to choose courses with your advisor and track progress towards milestones and completion of program.*

Pre-Degree Requirements		
Program Specific	Reading and Writing Placement *Placements based on TSI*	Mathematics Placement *Placements based on TSI*
	☐ Basic Developmental Courses ☐ ESOL Courses ☐ INRW Courses	☐ NCBM and MATD courses paired with MATH courses ☐ NCBM and MATD courses

SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

Plans can be modified to fit the needs of part-time students by adding more semesters

Semester 1	CR	Advising Notes
EDUC 1300 – Effective Learning: Strategies for College Success	3	Note: All first time Austin Community College (ACC) students with fewer than 12 SCH of successful college credit must take EDUC 1300 in their first semester at ACC. All other students may select either EDUC 1300 or a SPCH course from the Component Area Option List of courses in the Core Curriculum list. See an advisor or a full-time faculty member in the Biology program for more information.
ENGL 1301 – English Composition I	3	Prerequisite(s): TSI complete in reading and writing or exempt.
BIOL 1406 – Cellular and Molecular Biology	4	Prerequisite(s): One year of high school chemistry or one semester of college chemistry; two years of high school algebra or MATD 0390.
MATH 2412 – Precalculus: Functions and Graphs	3-4	Prerequisite(s): See course descriptions. Note: May select from MATH 1314, MATH 1316, MATH 2412, MATH 2413, or MATH 2414. Students must first consult with a mathematics advisor.
Art Appeciation	3	Note: May select an alternate course from the appropriate section of the Core Curriculum Course List.
	16-17	**Program Semester Hours / Meet with your advisor**
Semester 2		
ENGL 1302 – English Composition II	3	Prerequisite(s): ENGL 1301 or equivalent with minimum grade of C.
BIOL 1407 – Structure and Function of Organisms	4	Prerequisite(s): BIOL 1406 with a minimum grade of C.
MATH 2413 – Calculus I	3-4	Prerequisite(s): See course descriptions. May select from MATH 1314, MATH 1316, MATH 2412, MATH 2413, or MATH 2414. Students must first consult with a mathematics advisor.

CHEM 1311 – General Chemistry I - Lecture	3	Prerequisite(s): High school chemistry or CHEM 1305/CHEM 1105 and MATH 1314 or equivalent academic preparation with a grade of C or better. Corequisite(s): CHEM 1111.
CHEM 1111 – General Chemistry I - Lab	1	Prerequisite(s): High school chemistry or CHEM 1305/CHEM 1105 and MATH 1314 or equivalent academic preparation with a grade of C or better. Corequisite(s): CHEM 1311.
	14-15	**Program Semester Hours / Meet with your program advisor**
Semester 3		
HIST 1301 – United States History I	3	Note: Select from HIST 1301, HIST 2301, HIST 2327, or HIST 2381. HIST 2301 and HIST 2381 may only be taken once.
GOVT 2305 – United States Government	3	
Biology Elective	3-4	Note: Biology electives must total a minimum of six (6) semester hours, to be determined in consultation with a biology faculty advisor. Recommended courses include BIOL 1411, BIOL 1413, BIOL 2316 and BIOL 2421. PHYS 1402 and CHEM 2325/CHEM 2125 may be used as electives.
CHEM 1312 – General Chemistry II - Lecture	3	Prerequisite(s): CHEM 1311/CHEM 1111 and MATH 1314 or equivalent academic preparation with a grade C or better. Corequisite(s): CHEM 1112.
CHEM 1112 – General Chemistry II - Lab	1	Prerequisite(s): CHEM 1311/CHEM 1111 and MATH 1314 or equivalent academic preparation with a grade of C or better. Corequisite(s): CHEM 1312.
	15-17	**Program Semester Hours / Meet with your program advisor**
Semester 4		
SPCH 1311 – Introduction to Speech Communication	3	Note: May select an alternate course from the appropriate section of the Core Curriculum Course List.
GOVT 2306 – Texas State and Local Government	3	
HIST 1302 – United States History II	3	Note: Select from HIST 1301, HIST 2301, HIST 2327, or HIST 2381. HIST 2301 and HIST 2381 may only be taken once.
ENGL 2327 – American Literature: Beginnings through Civil War	3	Note: May select an alternate course from the appropriate section of the Core Curriculum Course List.
Biology Elective	3-4	Note: Biology electives must total a minimum of six (6) semester hours, to be determined in consultation with a biology faculty advisor. Recommended courses include BIOL 1411, BIOL 1413, BIOL 2206, BIOL 2316 and BIOL 2421. PHYS 1401 and PHYS 2425 may be used as an elective. **ACHIEVEMENT:** Associate of Science degree in Biology
	15-16	**Program Semester Hours**
Total Program Hours	**60-65**	

Please always check online at **catalog.austincc.edu** or meet with your academic or program advisor to ensure that you are viewing the latest and most accurate information.

Career & Transfer Resources

ACC's Career & Transfer websites provide detailed, guided information on career exploration and transfer.
www.austincc.edu/career
www.austincc.edu/transfer

For further information regarding this specific program, please see the Career & Transfer Resources supplement provided in the next section of this Program Map.

Program Map

Biology

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Career & Transfer Resources Updated 11/26/18

Transfer Information

The Associate of Science in Biology provides a transfer pathway to a 4-year institution where students can earn a bachelor's degree. Students are strongly encouraged to select a transfer destination by the time they have completed 24 semester credit hours.

Common majors students pursue at a 4-year institution include: Biology, Biochemistry, Bioinformatics, Aquatic Biology, Microbiology, Wildlife Biology

Transfer Guides: *The universities listed here do not constitute an ACC endorsement. Transfer course evaluations and determination of what courses will count toward a bachelor's degree are made by the receiving transfer institution.*

The University of Texas at Austin: https://admissions.utexas.edu/apply/transfer-resources/acc-transfer-guides
Texas State University: https://www.admissions.txstate.edu/future-students/transfer/tpg
Texas A&M University: https://admissions.tamu.edu/transfer/majors
Concordia University -Texas: http://www.concordia.edu/academics/school-of-natural-and-applied-sciences/biology/degree-requirements.html
St. Edward's University: https://www.stedwards.edu/undergraduate/biology
Huston-Tillotson University: http://htu.edu/academics/colleges/cas/dept-of-natural-sciences-mathematics/biology
Texas Tech University: https://catalog.ttu.edu/content.php?catoid=9&navoid=996
The University of Texas at San Antonio: https://www.utsa.edu/advise/1617_transfer/acc.html

Reverse Transfer: If you transfer to a four-year institution prior to graduating from ACC, you can still earn your associate degree through reverse transfer. More information on the reverse transfer process and requirements can be found at www.austincc.edu/students/transfer-services/reverse-transfer.

Additional Transfer Resources: ACC's transfer website provides information on additional colleges & universities: http://www.austincc.edu/transferguides. Students are encouraged to consult with a faculty advisor, area of study advisor, and/or their chosen transfer institution to ensure courses taken at ACC will apply toward their bachelor's degree program.

Career Information

Common Job Titles

Biologists, Zoologists and Wildlife Biologists, Microbiologists, Biological technician (includes Biological Science Laboratory Technician, Biological Technician, Environmental Technician, Laboratory Technician, Research Assistant, Research Associate, Research Specialist, Research Technician, Resource Biologist, Wildlife Biology Technician), Medical or chemical laboratory technician, Cytogenetic technologist, Cell culture technician, Clinical Research Coordinators
Many career opportunities in this field require completion of a bachelor's degree or higher.

Regional Labor Market Information

Biologists: New workers generally start around $47,290. Normal pay for Biologists is $71,678 per year, while highly experienced workers can earn as much as $92,393 in this region. There are currently 542 Biologists that are employed in Austin-Round Rock, TX.
Source: https://austincc.emsicc.com/careers/biologist

Biological Technicians: New workers generally start around $31,741. Normal pay for Biological Technicians is $44,051 per year, while highly experienced workers can earn as much as $102,387 in this region. Over the last year, 43 companies have posted 453 jobs for Biological Technicians.
Source: https://austincc.emsicc.com/careers/biological-technician/wages

Career and labor market research tools (see Quick Reference Guide at http://www.austincc.edu/career):
EMSI: https://austincc.emsicc.com/, Bureau of Labor Statistics: http://www.bls.gov/ooh/, O*NET: https://www.onetonline.org/

Career Resources: ACC's career services website provides information on career exploration and employment at http://www.austincc.edu/career. Students are encouraged to consult with their area of study advisor for additional career assistance. The above information is provided as a guide and reference tool for occupations related to this program. This is not a guarantee of job placement in any of these occupations after successful completion of an ACC program. The common job titles listed are representative titles and are provided for career research. These are not the only occupations possible in this area of study.