

For Curriculum Office Use Only

Date Submitted:

Approval date by Faculty Senate and Provost:

School:

Division:

Department:

Catalog Year:

Salt Lake Community College
PCO Curriculum and Learning Outcomes
for Associate of [Pre-Science](#) Degree

Program Title: [Biology](#)

Credential: [Associate of Pre-Science](#)

Total Cr: [69 to 85](#)

PROGRAM LEARNING OUTCOMES

Program Student Learning Outcomes mapped to [SLCC College-Wide Student Learning Outcomes](#).

- | | |
|------------------------------------|---|
| 1. Acquire substantive knowledge | 5. Become a community engaged learner |
| 2. Communicate effectively | 6. Work in a professional & constructive manner |
| 3. Develop quantitative literacies | 7. Develop computer & information literacy |
| 4. Think critically & creatively | 8. Develop lifelong wellness |

Program Learning Outcomes	SLCC CWSLO #
Students will acquire the foundational biological principles necessary for successful transfer to a bachelor program.	1, 2, 4
Students will acquire the foundational chemical principles necessary for successful transfer to a bachelor program.	1, 2, 4
Students will acquire the foundational mathematical knowledge and skills necessary for successful transfer to a bachelor program.	1, 2, 3, 4
Students will acquire the foundational writing knowledge and skills necessary for successful transfer to a bachelor program.	1, 2, 3, 4
Students will initiate their Program of General Education under the guidance of an academic advisor to ensure that they acquire the most efficient package of courses to transfer to the bachelor's institution of choice.	1, 2, 3, 4, 5, 6, 7, 8

See [SLCC Assessment webpage](#) for additional details about College-Wide Student Learning Outcomes

Biology APS GENERAL EDUCATION REQUIREMENTS (25 cr)

Specifying or embedding General Education courses requires approval by the SLCC General Education Committee. For a current list of approved General Education courses, see the [SLCC Catalog](#).

CORE SKILLS

COMPOSITION (EN) 2 courses

ENGL 1010 (3)

ENGL 2010 OR 2100 (3)

QUANTITATIVE LITERACY (QL) **MATH 1210 (4)**

AMERICAN INSTITUTIONS (AI) **1 course (3)**

DISTRIBUTION AREAS

FINE ARTS (FA) **1 course (3)**

HUMANITIES (HU) **1 course (3)**

SOCIAL SCIENCES (SS) **1 course (3)**

LIFE SCIENCE (LS) **BIOL 1610 (3)**

*Distribution Areas: Physical Science (PS) component is satisfied through pre-major coursework.

REQUIRED COURSES (64 cr)

All course changes (title, credit, pre-req, semester taught, etc ...) must be proposed on the CCO document.

Prefix	Number	Title	Cr/Hrs
BIOL	1610	College Biology I	3
BIOL	1615	College Biology I Lab	1
BIOL	1620	College Biology II	4
BIOL	1625	College Biology II Lab	0
BIOL	2020	Cell Biology	4
BIOL	2025	Cell Biology Lab	0
BIOL	2030	Genetics	4
BIOL	2035	Genetics Lab	0
ENGL	1010	Intro to Writing	3
ENGL	2100	Technical Writing	3
	OR		
ENGL	2010	Intermediate Writing	3
MATH	1210	Calculus I	4
MATH	1220	Calculus II	4
CHEM	1210	General Chemistry I	4
CHEM	1215	General Chemistry I Lab	1
CHEM	1220	General Chemistry II	4
CHEM	1225	General Chemistry II Lab	1
CHEM	2310	Organic Chemistry I	4
PHYS	2010	College Physics I	4
& PHYS	2020	College Physics II	4
	OR		
PHYS	2210	Physics for Science & Engineering I	4
& PHYS	2220	Physics for Science & Engineering II	4
		American Institutions	3
		Fine Arts	3
		Humanities	3
		Social Sciences	3
		TOTAL:	64

ELECTIVE COURSES (4-21 cr)

Elective requirements:

Prefix	Number	Title	Cr/Hrs
MATH	1010	Intermediate Algebra	4
MATH	1050	College Algebra	4
MATH	1060	Trigonometry	3
MATH	1080	Precalculus	5
BIOL	1010	Introduction to Biology	3
BIOL	1015	Introduction to Biology Lab	1
BIOL	2060	Microbiology	3
BIOL	2065	Microbiology Lab	1
BIOL	2320	Human Anatomy	3
BIOL	2325	Human Anatomy Lab	1
BIOL	2420	Human Physiology	3
BIOL	2425	Human Physiology Lab	1
BIOL	2900	Special Topics in Biology	1-5
BIOL	2990	Independent Study	1-2
STEM	2010	Original Research Proposal in STEM	1
CHEM	1010	Intro to Chemistry	3
CHEM	2315	Organic Chemistry I Lab	1
CHEM	2320	Organic Chemistry II	4
CHEM	2325	Organic Chemistry II Lab	1
PHYS	1010	Elementary Physics	3
		Fine Arts (one additional course, see Advising Notes)	3
		Humanities (one additional course, see Advising Notes)	3
		Social Sciences (one additional course, see Advising Notes)	3
		TOTAL:	4 to 21

ADVISING NOTES: Elective Courses should be selected based on the student’s level of preparation and the benefit the course provides toward a Bachelor’s Degree upon transfer. If students would benefit from additional math and science preparation before starting on the majors level courses, students are recommended to enroll in the Biology APS program. The degree map is built based on the math and English where the majority of Biology AS students are currently entering. If students need development math or English courses, this will delay entry into the courses included in the APS program. If students are well prepared in both math and science, they should consider pursuing the Biology AS degree instead.

At least one of the required Fine Arts (FA), Humanities (HU), or Social Science (SS) courses should be a Diversity (DV) course. Depending on entry point and desired electives, students may have time in their schedules to take additional general education courses beyond those that are required. If they choose to take additional general education courses, but do not plan on completing all of the general education

requirements at SLCC, then students are advised to select general education courses that will go toward the general education requirements of their transfer institution. The University of Utah is the primary transfer institution for Biology students and courses that count towards their general education requirements are listed in the electives. The general education requirements for other USHE institutions beyond what is required in the Biology APS program vary, but where possible, the additional course requirements are included in the electives. If students have time in their schedule to complete the entire SLCC general education program, it is advised that they obtain the Certificate of Proficiency in General Education from SLCC concurrently with this Biology APS degree.