LIBERAL ARTS - BIOLOGICAL AND PHYSICAL SCIENCES ASSOCIATE OF ARTS DEGREE

Biological and Physical Sciences

These courses emphasize the natural sciences, which examine the physical universe, its life forms, and natural phenomena. Courses in mathematics emphasize the development of mathematical and quantitative reasoning skills beyond the level of intermediate algebra. Students will be able to demonstrate an understanding of the methodologies of science as investigative tools. Students will also examine the influence that the acquisition of scientific knowledge has on the development of world civilization. Students must choose a minimum of 18 units, two courses from one discipline required.

Code	Title	Units
Anthropology		
ANTHRO 106	Biological Anthropology	3
or ANTHRO 106	Biological Anthropology - Honors	
ANTHRO 106L	Biological Anthropology Laboratory	1
Astronomy		
ASTRON 120	Introduction to Astronomy	3
ASTRON 125	Astronomy Laboratory	1
Biology		
BIOL 100	General Biology	4
BIOL 104	Human Ecology	3
BIOL 141	Genetics	3
BIOL 155	Introductory Anatomy and Physiology	4
BIOL 205	Cell and Molecular Biology	4
BIOL 206	Organismal Biology	4
BIOL 207	Evolutionary Ecology	4
BIOL 250	Human Anatomy and Physiology I	4
BIOL 251	Human Anatomy and Physiology II	4
BIOL 260	Human Anatomy	4
BIOL 261	Human Physiology	4
BIOL 270	Microbiology	5
Chemistry		
CHEM 101	Introductory Chemistry	4
CHEM 104	Introduction to Organic Chemistry and Biochemistry	4
CHEM 105	Introduction to General, Organic and Biochemistry	5
CHEM 150	General Chemistry I	5
CHEM 151	General Chemistry II	5
CHEM 212	Organic Chemistry I	5
CHEM 213	Organic Chemistry II	5
Economics		
ECON 208	Business and Economic Statistics	4
Environmental Science		
ENVSCI 100	Introduction to Environmental Science	3
Geography		
GEOG 110	Physical Geography	3
GEOG 111	Physical Geography Laboratory	1
or GEOG 111H	Physical Geography Laboratory - Honors	
GEOG 114	Weather and Climate	4
Geology		
GEOL 101	Introduction to Physical Geology	3
GEOL 111	Introduction to Physical Geology Laboratory	1
GEOL 112	Historical Geology	4
GEOL 122	Environmental Geology	3
GEOL 140	Earth Science	3
GEOL 141	Earth Science Laboratory	1
GEOL 250	Geology of California	3
GEOL 251	Geology of the National Parks and Monuments	3
Mathematics		
MATH 102	College Algebra	4
MATH 103	Plane Trigonometry	4
MATH 108	Introduction to Probability and Statistics	4
or MATH 108H	Introduction to Probability and Statistics - Honors	
MATH 115	Ideas of Mathematics	3
MATH 141	Business Calculus	4
MATH 151	Precalculus	4
MATH 180	Introduction to Data Science	4
MATH 250	Single Variable Calculus I	4
MATH 251	Single Variable Calculus II	4
MATH 252	Multivariable Calculus	5
MATH 265	Linear Algebra	4
MATH 266	Ordinary Differential Equations	4
Oceanography		
OCEAN 101	Elements of Oceanography	3
OCEAN 111	Elements of Oceanography Laboratory	1
Physics		
PHYSIC 101	Introductory Physics	4
PHYSIC 151	General Physics for the Life Sciences I	4
PHYSIC 152	General Physics for the Life Sciences II	4
PHYSIC 202	Physics I	4
PHYSIC 203	Physics II	4
PHYSIC 204	Physics III	4
Psychology		
PSYCH 105	Statistics for the Behavioral Sciences	4
PSYCH 141	Introduction to Biological Psychology [1]	3
Total Units		**18**

[1] Completed Fall 2009 or later

To earn an SBVC Associate Degree students must complete one of the following general education patterns:

SBVC GE requirements (https://www.valleycollege.edu/student-services/counseling/graduation-requirements/)

CSU GE requirements (https://www.valleycollege.edu/student-services/counseling/csuge/)

IGETC requirements (https://www.valleycollege.edu/student-services/counseling/igetc/)

Program Learning Outcomes

At the completion of this program, students will be able to:

a. Utilize the degree to begin working in the field or transfer to an accredited four-year university as a junior in a Biological and/or Physical Science major.