

# LIBERAL ARTS: EMPHASIS IN MATH AND SCIENCE

## Associate in Arts

**Non-Transfer: Option 1 (Major Code: 01378)** <sup>Footnote 1</sup>

**Transfer Preparation: Options 2 & 3 (Major Code: 01870)** <sup>Footnotes \*, 1, 2</sup>

The Associate of Arts in Liberal Arts Degree is designed for students who wish a broad knowledge of liberal arts and sciences plus additional coursework in an "Area of Emphasis." The Associate of Arts in Liberal Arts Degree would be an ideal choice for those students planning on transferring to the California State University or University of California as the student can satisfy their general education requirements, plus focus on transferable course work that relates to majors at CSU or UC.

- Choose either Option 1, 2 or 3 for the General Education pattern related to your educational goal.
- Complete a minimum of 18 units from the courses listed below. For Option 1, courses cannot be double-counted to satisfy general education requirements.
- Complete a minimum of 60 degree applicable transferable semester units (including major and general education courses).
- For ALL OPTIONS: complete necessary Southwestern College Graduation and Proficiency requirements (See Southwestern College Catalog)
- Courses with an "\*" are not UC transferable.
- Courses should be selected with the assistance of a counselor. Refer to ASSIST.org (<https://assist.org/>) for transfer details.
- Completion of the Liberal Arts Degree does not guarantee acceptance into a four year institution nor into a major.

## Program Student Learning Outcome

- Demonstrate mathematical and quantitative reasoning skills necessary to engage competently in personal, professional, civic, and social contexts.

Code	Title	Units
<b>Option 1</b> <sup>Footnote 1</sup>		
	<i>Southwestern College Associate Degree General Education</i>	
	Minimum units necessary to meet Southwestern Associate Degree requirements	18
<b>Option 2</b> <sup>Footnotes *, 1, 2</sup>		
	<i>CSU GE Breadth</i>	
	Minimum units necessary to meet CSU/GE Certification requirements	39
<b>Option 3</b> <sup>Footnotes *, 1, 2</sup>		
	<i>IGETC</i>	
	Minimum units necessary to meet IGETC Certification requirements	34

Code	Title	Units
<b>Math &amp; Science Emphasis</b>		
These courses emphasize the natural sciences which examine the physical universe, its life forms and its natural phenomena. Courses in Math 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 the world's civilizations.		
<i>Select a minimum of 18 units of the following courses:</i>		<i>18</i>
ANTH 101	BIOLOGICAL ANTHROPOLOGY	
ANTH 101L	LABORATORY IN BIOLOGICAL ANTHROPOLOGY	
ASTR 100	PRINCIPLES OF ASTRONOMY	
ASTR 109	ASTRONOMY LABORATORY	
ASTR 120	SOLAR SYSTEM ASTRONOMY	
ASTR 150	DISCOVERY OF THE COSMOS	
ASTR 170	THE RADICAL UNIVERSE	
ASTR 180	LIFE IN THE UNIVERSE	
ASTR 205	ELEMENTARY ASTROPHYSICS	
BIOL 100	PRINCIPLES OF BIOLOGY	
BIOL 101	PRINCIPLES OF BIOLOGY LABORATORY	
BIOL 130	ANIMAL BIOLOGY: A BEHAVIORAL APPROACH	
BIOL 131	ANIMAL BIOLOGY LABORATORY	
BIOL 140	ENVIRONMENTAL BIOLOGY	
BIOL 145	ECOMUNDO: ECOLOGY AND ENVIRONMENTAL SCIENCE	
BIOL 150	NATURAL HISTORY OF PLANTS AND ANIMALS	
BIOL 151	THE SCIENCE OF BREWING BEER	
BIOL 151L	INTRODUCTION TO THE SCIENCE OF BREWING LAB	
BIOL 160	MARINE BIOLOGY	
BIOL 161	MARINE BIOLOGY LABORATORY	
BIOL 180	HUMAN HEREDITY, EVOLUTION, AND SOCIETY	
BIOL 185	BIOLOGY OF ALCOHOL AND OTHER DRUGS	
BIOL 190	HUMAN ANATOMY AND PHYSIOLOGY	
BIOL 210	GENERAL ZOOLOGY	
BIOL 211	INTRODUCTION TO CELL AND MOLECULAR BIOLOGY	
BIOL 212	BIOLOGY OF PLANTS	
BIOL 215	BIOSTATISTICS	
BIOL 260	HUMAN ANATOMY	
BIOL 261	PRINCIPLES OF HUMAN PHYSIOLOGY	
BIOL 265	GENERAL MICROBIOLOGY	
CHEM 100	INTRODUCTION TO GENERAL CHEMISTRY	
CHEM 102	GENERAL, ORGANIC, AND BIOLOGICAL CHEMISTRY	



<sup>2</sup> Option 2 & 3: Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center. See catalog Transfer Courses Information (<http://catalog.swccd.edu/student-services-college-services/other-college-services-students/transfer-courses/>) section for further information.