LIBERAL ARTS - SCIENTIFIC INQUIRY AND QUANTITATIVE REASONING - ASSOCIATE IN ARTS

Scientific Inquiry and Quantitative Reasoning 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.

Transferability

This major can prepare students with either a narrow or interdisciplinary focus in mathematics and natural science in order to pursue similar majors at four-year institutions. Student should refer to the catalog of their prospective transfer institution and consult a counselor. General Education courses for the A.A. degree, should be selected carefully to meet the requirements of the intended transfer institution. A grade of "C" or better is required in all coursework for the major.

Program Learning Outcomes

- Explain the methodologies of science as investigative tools.
- Examine the influence that the acquisition of scientific knowledge has on the development of the world's civilizations.

Major Requirements

Code	Title	Units
Select 18 units from the following:		18
ASTRO 010	Introduction to Astronomy	
ASTRO 010L	Introductory Astronomy Lab	
BIOL 004A	General Principles and Cell Biology	
BIOL 004B	Biodiversity and Organismal Biology	
BIOL 020	Human Biology	
BIOL 021	General Biology	
BIOL 061	Human Heredity	
BIOL 063	Ecology	
BIOL 064	Marine Biology	
BIOL 066	Botany	
BIOL 071	Human Anatomy	
BIOL 072	Human Physiology	
BIOL 074	General Microbiology	
CHEM 001A	General Chemistry	
CHEM 001B	General Chemistry	
CHEM 010	Everyday Chemistry	
CHEM 012A	Organic Chemistry	
CHEM 012B	Organic Chemistry	
CHEM 015	Fundamentals of Chemistry	
CHEM 032A	Intro to General, Organic, & Biological Chemistry	
CHEM 032B	Intro to General, Organic, & Biological Chemistry	
CHEM 061	Introduction to Fermentation Chemistry	
CHEM 065	Quantitative Analysis	
ENVIR 010	Environmental Science	
GEOG 010	Introduction to Physical Geography	
GEOL 010	Physical Geology	
GEOL 010L	Physical Geology Laboratory	
GEOL 015	Earth Science	
GEOL 015L	Earth Science Laboratory	
METEO 010	Weather and Climate	
MATH 021	Precalculus Algebra	
MATH 022	Trigonometry	
MATH 025	Precalculus Algebra and Trigonometry	
MATH 051	Mathematics for General Education	
MATH 052	Mathematics for Elementary Education	
MATH 061	Finite Mathematics	
MATH 062	Calculus for Business and the Social Sciences	
MATH 063	Elementary Statistics	
MATH 070	Discrete Mathematics	
MATH 071	Calculus I With Analytic Geometry	
MATH 072	Calculus II with Analytic Geometry	
MATH 073	Multivariable Calculus	
MATH 078	Differential Equations	
MATH 079	Linear Algebra	
OCEAN 010	Descriptive Oceanography	
PHYS 002A	Algebra/Trigonometry-Based Physics I	
PHYS 002B	Algebra/Trigonometry-Based Physics II	
PHYS 004A	General Physics	
PHYS 004B	General Physics	
PHYS 004C	General Physics	
PSYCH 031	Biological Psychology	
Total Units		18

A.A. Liberal Arts - Scientific Inquiry and Quantitative Reasoning

Code	Title	Units
Major Requirements		18
General Electives if necessary to reach 60 units		2
General Education Requirements		39
Physical Activity		1
Total Units		60