AA Interdisciplinary Studies: Natural Science and Mathematics

The Natural Science and Mathematics are a gateway to a very large number of occupations, many of which require specific coursework for transfer and/or admission to professional schools. In general, careers in the natural sciences require strong computational, communication and analytical thinking skills.

The degree in Interdisciplinary Studies with emphasis in Natural Science and Mathematics prepares students for further study and employment as life and physical scientists, health practitioners, engineers and science technicians.

Courses should be chosen carefully in consultation with a counselor.

A. Complete 18 units in the Natural Science & Mathematics areas as shown below.

B. The remaining units should be chosen in consultation with a counselor to fulfill Associate Degree General Education requirements and electives for a total of 60 degree-applicable units for an Associate Degree.

Program Learning Outcomes

Students completing this program will be able to:

1. Use the scientific method to investigate scientific questions and critically evaluate and effectively communicate scientific data.
2. Use symbolic, graphical and numerical representation of mathematical ideas to address real world problems.
3. Critically evaluate scientific information and examine its significance and impact on society and the environment.

AA Degree Requirements
Major: Core and Selective Requirements

Selective Courses, choose a minimum of 18 units from the following:

I. Introductory Science Courses, select a minimum of 9 units:**		**Units**
1. Biology: a student may choose up to 2 of the following courses to meet this requirement:		
BIOL 110	Principles Of Biology	4 units
BIOL 130	Human Biology	3 units
BIOL 132	Human Biology Laboratory	1 unit
BIOL 310	Nutrition	3 units
2. Chemistry: a student may choose 1 of the following courses to meet this requirement:		
CHEM 192	Elementary Chemistry	4 units
CHEM 210	General Chemistry I	5 units
CHEM 410	Chemistry for Health Sciences	4 units
3. Physics: a student may choose 1 of the following courses to meet this requirement:		
PHYS 210	General Physics I	4 units
PHYS 250	Physics with Calculus I	4 units
4. Other sciences: a student may choose up to 3 of the following courses to meet this requirement:		
ANTH 125	Biological Anthropology	3 units
ASTR 100	Introduction to Astronomy	3 units
	AND	
ASTR 101	Astronomy Laboratory	1 unit
CIS 118	Introduction to Computer Science	4 units
	OR	
CIS 122	Introduction to Programming: Python	3 units
ENGR 100	Introduction to Engineering	3 units
ENVS 115	Environmental Science	3 units
GEOG 100	Physical Geography	3 units
GEOL 100	Introduction to Geology	3 units
	AND	
GEOL 101	Geology Laboratory	1 unit
HSCI 100	General Health Science	3 units
METE 100	Meteorology - Weather and Climate	3 units
OCEN 100	Oceanography	3 units
	AND	
OCEN 101	Oceanography Lab	1 unit

***At least one introductory OR advanced course MUST have a laboratory experience included or a laboratory course must be taken.*

II. Mathematics Competency, select a minimum of 3 units:		**Units**
MATH 125	Elementary Finite Mathematics	3 units

MATH 130	Analytical Trigonometry	4 units
STAT C1000	Introduction to Statistics	4 units
MATH 225	Path to Calculus	6 units
MATH 241	Business Calculus I	5 units
MATH 251	Analytical Geometry and Calculus I	5 units

III. Advanced Courses, select a minimum of 6 units:** **Units**

BIOL 225	Biology Of Organisms	5 units
BIOL 230	Cell and Molecular Biology	5 units
BIOL 240	General Microbiology	4 units
BIOL 250	Human Anatomy	4 units
BIOL 260	Human Physiology	5 units
CHEM 220	General Chemistry II	5 units
CHEM 231	Organic Chemistry I	5 units
CIS 242	Computer Architecture and Assembly Language	3 units
CIS 262	Discrete Mathematics for Computer Science	3 units
MATH 252	Analytical Geometry and Calculus II	5 units
MATH 253	Analytic Geometry and Calculus III	5 units
PHYS 220	General Physics II	4 units
PHYS 260	Physics with Calculus II	4 units
PHYS 270	Physics with Calculus III	4 units

***At least one introductory OR advanced course MUST have a laboratory experience included or a laboratory course must be taken.*

Please refer to the AA/AS Degree Requirements for more information.