INTERDISCIPLINARY STUDIES: EMPHASIS IN SCIENCE AND MATHEMATICS ASSOCIATE IN ARTS DEGREE

PROGRAM CODE: 2A18163

Interdisciplinary Studies with an Emphasis in Science and Mathematics: prepares students with 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 human experience. This emphasis includes lower-division coursework that prepares students for majors in science, math, and health related fields. Transfer pathways may have additional requirements outside of this degree. Please see a counselor to explore your options. This degree requires 18-22 units, in addition to other graduation requirements.

Code	Title	Units
Select at least one course from each category (A and B) and then complete additional courses in categories A and/or B for a total of 18-22 units:		**18-22**
A) Sciences		
ANAT 231 F	General Human Anatomy	4
ANAT 240 F	Human Physiology	5
ANTH 101 F	Biological Anthropology	3
or ANTH 101HF	Honors Biological Anthropology	
ANTH 101LF	Biological Anthropology Lab	1
BIOL 100 F	Principles of Biology	4
BIOL 101 F	General Biology	5
or BIOL 101HF	Honors General Biology	
BIOL 102 F	Human Biology	3
BIOL 102LF	Human Biology Laboratory	1
BIOL 104 F	Biology of Insects and Spiders	3
BIOL 108 F	Plants and People	3
BIOL 109 F	Genetics and Biotechnology in Society	3
BIOL 109LF		2
BIOL 141 F	Marine Mammal Biology and Conservation	3
BIOL 170 F	Organismal Biology	5
BIOL 190 F	Introduction to Biotechnology	3
BIOL 190LF	Introduction to Biotechnology Lab	1
BIOL 222 F	Marine Biology	3
BIOL 272 F	Cell and Molecular Biology	4
BIOL 274 F	General Ecology	4
CHEM 100 F	Chemistry for Daily Life	4
CHEM 101 F	Chemistry for Allied Hlth Sci	5
CHEM 103 F	Chemistry in a Changing World	3
CHEM 107 F	Preparation for General Chemistry	5
CHEM 111AF	General Chemistry I	5
CHEM 111BF	General Chemistry II	5
ESC 100 F	Physical Geology	3
ESC 100LF	Physical Geology Lab	1
ESC 101 F	Earth Science Survey	3
ESC 101LF	Earth Science Survey Lab	1
ESC 103 F	Historical Geology	4
ESC 104 F	Geology of National Parks and Monuments	3
ESC 105 F	Introduction to Weather and Climate	3
ESC 105LF	Introduction to Weather and Climate Laboratory	1
ESC 106 F	Geology of Orange County Area	2
ESC 107 F	Earth Science for Educators	4
ESC 110 F	Introduction to Climate Science	3
ESC 116 F	Astronomy	3
or ESC 116HF	Honors Astronomy	
ESC 116LF	Astronomy Lab	2
ESC 120 F	Geology of California	3
ESC 130 F	Introduction to Oceanography	3
or ESC 130HF	Honors Introduction to Oceanography	
ESC 130LF	Introduction to Oceanography Field Experience	1
ESC 190 F	Environmental Geology	3
ENVS 105 F	Environmental Biology	3
ENVS 105LF	Environmental Biology Lab	1
GEOG 102 F	Physical Geography	3
or GEOG 102HF	Honors Physical Geography	
GEOG 102LF	Physical Geography Lab	1
HED 140 F	Health Science	3
HORT 152 F	Applied Botany	4
HORT 205 F	Applied Entomology	3
HORT 207 F	Plant Pathology	3
MICR 220 F	Medical Microbiology	4
MICR 262 F	General Microbiology	5
NUTR 210 F	Human Nutrition	3
or NUTR 210HF	Honors Human Nutrition	
PHYS 120 F	Relativity for Poets	3
PHYS 130 F	Elementary Physics	4
PHYS 205 F	Physics for the Life Sciences I	4
PHYS 206 F	Physics for the Life Sciences II	4
PHYS 210 F	Physics with Calculus for the Life Sciences I	4
PHYS 211 F	Physics with Calculus for the Life Sciences II	4
PHYS 221 F	General Physics I	4
PHYS 222 F	General Physics II	4
PHYS 223 F	General Physics III	4
B) Mathematics		
BUS 101 F	Personal Financial Management	3
BUS 151 F	Business Mathematics	3
MATH 100 F	Liberal Arts Mathematics	3
MATH 120 F	Introductory Probability and Statistics	4
or MATH 120HF	Honors Introductory Probability and Statistics	
MATH 121 F	Introductory Probability and Statistics with Support	5
MATH 129 F	College Algebra for Business Calculus	4

MATH 130 F	Calculus for Business	4
MATH 131 F	Calculus Business w/ Support	5
MATH 141 F	College Algebra	4
or MATH 141HF	Honors College Algebra	
MATH 142 F	Trigonometry	4
MATH 143 F	College Algebra with Support	5
MATH 144 F	Trigonometry with Support	5
MATH 151 F	Calculus I (formerly MATH 150AF)	4
or MATH 151HF	Honors Calculus I (formerly MATH 150HF)	
MATH 152 F	Calculus II (formerly MATH 150BF)	4
or MATH 152HF	Honors Calculus II	
MATH 170 F	Discrete Structures	4
MATH 171 F	Discrete Mathematics	4
MATH 172 F	Graph Theory and Linear Algebra	4
MATH 251 F	Multivariable Calculus (formerly MATH 250AF)	4
MATH 252 F	Linear Algebra and Differential Equations (formerly MATH 250BF)	4
MATH 255 F	Linear Algebra	3
MATH 260 F	Ordinary Differential Equations	3
PSY 161 F	Elementary Statistics for Behavioral Science	4
or PSY 161HF	Honors Elementary Statistics for Behavioral Science	
SOSC 120 F	Introduction to Probability and Statistics	4
Total Units		**18-22**

Program Level Student Learning Outcomes

OUTCOME 1: Demonstrate an understanding of the methodologies of science as investigative tools to evaluate information, and form conclusions to solve problems.

OUTCOME 2: Develop mathematical and quantitative reasoning skills to evaluate issues related to the physical and biological sciences from an evidence-based perspective to understand its impact on society, environment, and daily life.

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https://www.curricunet.com/fullerton/reports/program_report.cfm?programs_id=1397