GENERAL STUDIES
In Science & Mathematics
ASSOCIATE OF SCIENCE DEGREE

Choose <u>at least one course from each category</u> (A, B and C) and then complete additional courses in any category to total **18 units** from the following list. Among these courses the student <u>must complete at least one laboratory course</u>.

General Studies with an Area of Emphasis

The General Studies degree with an area of emphasis is designed to give students a broad introduction to an area of knowledge represented by related disciplines and topics. This degree is intended for students who may not be intending to pursue a specific occupational major, nor are they necessarily planning to transfer. However, careful educational planning with a counselor will help to ensure that if a student did decide at a later date to transfer to a university, they would have a foundation in the transfer planning process. Students will select an "Area of Emphasis" based on their interests and educational goals.

General Studies with an Emphasis in Science and Mathematics:

These courses emphasize the natural sciences, which examine the physical universe, its life forms and its natural phenomena. As mathematics is the language of science, courses in mathematics help students develop 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 potential careers in science, engineering, math, and health related fields.

To acquire the Associate of Science Degree in General Studies with an Emphasis in Science and Mathematics, students must complete the required major courses below with a grade of "C" or better or of "P" if the course was taken on a Pass/No Pass basis, along with either of the following: Rio Hondo College General Education (RHC GE) or California General Education Transfer Curriculum (Cal-GETC). California State University General Education - Breadth (CSU GE) or Intersegmental General Education Transfer Curriculum (IGETC) may be used in some cases; please see a counselor for details.

Category A: Life Sciences	Units	N	IP	C
ANTH 101 or 101H *Introduction to Physical Anthropology/*Honors	3			
ANTH 101L *Physical Anthropology Lab	1			
BIOL 101 General Biology	4			
BIOL 105 Human Biology	3			
BIOL 105L Human Biology Laboratory	1			
BIOL 111 Marine Biology	3			
BIOL 111L *Marine Biology Laboratory	1			
BIOL 112 Outdoor Biology	3			
BIOL 120 Environmental Biology	3			
BIOL 120L *Environmental Biology Laboratory	1			
BIOL 200 *Principles of Biology 1 (Molecular and Cellular Biology)	5			
BIOL 201 *Principles of Biology 2 (Diversity and Ecology)	5			
BIOL 206 *Principles of Genetics	3			
BIOL 222 *Microbiology	5			
BIOL 226 *Human Physiology	4			
BIOT 100 Introduction to Biotechnology	4			
PSY 210 or 210H *Biological Psychology/*Honors	3			
Category B: Physical Sciences				
ASTR 110 or 110H General Astronomy/*Honors	3			
ASTR 112 *Observational Astronomy	1			
ASTR 137 *Introduction to Cosmology: Big Bang to Multiverse	4			
CHEM 110 *Chemistry for Allied Health Majors	5			
CHEM 120 *Introduction to Chemistry	5			
CHEM 130 *General Chemistry	5			
CHEM 140 *General Chemistry	5			
CHEM 230 *Organic Chemistry I	5			
CHEM 231 *Organic Chemistry II	5			
GEOG 101 Introduction to Physical Geography	3			
GEOG 101L *Introduction to Physical Geography Laboratory	1			
GEOL 150 Physical Geology	3			
GEOL 151 *Physical Geology Laboratory	1			
GEOL 152 Historical Geology	3			
GEOL 152L *Historical Geology Lab	1			
PHY 120 *Physics for Everyday Use	4			
PHY 150 *General Physics-I	4			
PHY 160 *General Physics-II	4			
PHY 211 *Physics for Scientists and Engineers-I	4			
PHY 212 *Physics for Scientists and Engineers-II	4			
PHY 213 *Physics for Scientists and Engineers-III	4			
Category C: Mathematics				
FIN 101 *Introduction to Financial Planning	3			
STAT C1000/H *Introduction to Statistics/*Honors	4			
MATH 140 *Mathematics for Elementary Teachers	4			
MATH 150 *Survey of Mathematics	3			
MATH 160 *College Algebra	4			
MATH 170 *Elements of Calculus	4			
MATH 175 *Plane Trigonometry	3			
MATH 180 *Pre-Calculus	4			
MATH 190 or 190H *Calculus I/*Honors	4			
MATH 191 *Calculus II	4			
MATH 250 *Calculus III	4			
MATH 251 *Linear Algebra and Differential Equations	5			
MATH 260 *Linear Algebra	4			
MATH 270 *Differential Equations	4			
PSY 190 *Statistics for the Behavioral Sciences	4			
Total major units needed for Associate in Science	18			