NATURAL SCIENCE, ASSOCIATE IN SCIENCE DEGREE

Banner Code: 1_AS_NS Control Number: 14412 Financial Aid Eligible

Complete eighteen (18) units from the following and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog. If a student chooses this degree option, a plan must be developed with a counselor and placed on file prior to petitioning for graduation.

Review Graduation Requirements (https://catalog.cccd.edu/orange-coast/graduation-requirements/associate-degree/) and General Education (https://catalog.cccd.edu/orange-coast/general-education-patterns/).

Course	Title	Units
Required Courses		
Select a minimum of	eighteen (18) units from the following:	
ASTRONOMY		
ASTR A100	Introduction to Astronomy	3
or ASTR A100H	Introduction to Astronomy Honors	
ASTR A100L	Introduction to Astronomy Laboratory	1
or ASTR A100M	Introduction to Astronomy Laboratory Honors	3
ASTR A101	Planetary Astronomy	3
ASTR A102	Stellar Astronomy	3
ASTR A103	Cosmology	3
BIOLOGY		
BIOL A100	Principles of Biology	4
BIOL A101	The Biology of Cooking	4
BIOL A114	Basic Microbiology	2
BIOL A125	Human Biology	3
BIOL A172	Nature of Birds	1
BIOL A180	Introduction to Biology for Majors 1: Cell and Molecular Biology	4
BIOL A182	Zoology	3
BIOL A182L	Zoology Lab	1
BIOL A183	Botany	3
BIOL A183L	Botany Lab	1
BIOL A185	Introduction to Biology for Majors 2: Ecology, Evolution, Diversity, and Physiology	5
BIOL A210	General Microbiology	5
BIOL A220	Human Anatomy	5
BIOL A221	Anatomy-Physiology	4
BIOL A225	Human Physiology	5
BIOL A280	Evolutionary Ecology	4
BIOL A281	Biochemistry	2
BIOL A282	Molecular Biology	2
BIOL A283	Genetics	4
CHEMISTRY		

Course	Title	Units
CHEM A100	Principles of Chemistry	3
CHEM A110	Introduction to Chemistry	5
CHEM A130	Preparation for General Chemistry	4
CHEM A180	General Chemistry A	5
CHEM A185	General Chemistry B	5
CHEM A220	Organic Chemistry A	3
CHEM A220L	Organic Chemistry A Lab	2
CHEM A225	Organic Chemistry B	3
CHEM A225L	Organic Chemistry B Laboratory	2
ENVIRONMENTAL SCI		2
ESEC A100	Introduction to Environmental Science	3
ESEC A110	Island Ecology	3
ESEC A121	Marine Intertidal Ecology	1
ESEC A124	Ecology of the Gray Whale	1
GEOLOGY	Leology of the dray Whate	'
GEOL A101	Age of the Dinosaurs	4
GEOL A105	General Geology	3
or GEOL A105H	General Geology Honors	3
GEOL A105L	General Geology Laboratory	1
or GEOL A105M	General Geology Laboratory Honors	'
GEOL A106	Earth Science for Teachers	4
GEOL A110	Physical Geology	4
GEOL A115	California Geology	3
GEOL A113	Environmental Geology	4
GEOL A185	Evolution of the Earth	3
GEOL A185L	Evolution of the Earth Lab	1
MARINE SCIENCE	Evolution of the Earth Eab	
MRSC A100	Oceanography	3
or MRSC A100H	Oceanography Honors	3
MRSC A100L	Oceanography Laboratory	1
or MRSC A100M	Oceanography Laboratory Honors	•
MRSC A120	Marine Aquarium Science	2
MRSC A180	Marine Biology	3
MRSC A180L	Marine Biology Lab	1
MRSC A185	Coastal Oceanography	3
MRSC A185L	Coastal Oceanography Lab	1
MRSC A187	Marine Mammals	3
PHYSICS		
PHYS A110	Conceptual Physics	3
PHYS A111	Introductory Physics Laboratory	1
PHYS A120	Algebra Based Physics: Mechanics	4
PHYS A125	Algebra Based Physics:Electricity/	4
	Magnetism	
PHYS A130	University Physics 1 (non-majors)	4
PHYS A135	University Physics 2 (non-majors)	4
PHYS A185	Calculus Based Physics: Mechanics	4
PHYS A280	Calculus Based Physics: Electricity/	4
	Magnetism	
PHYS A285	Calculus Based Physics: Modern	4
Total		18
AS General Education Option 1, 2, or 3		

Course	Title	Units
Transferable electives to satisfy unit requirement		Varies
Total Degree Units		60

Program Sequence

These sequences at Orange Coast College are general course curriculum maps for students to finish all major and general education requirements for two-year completion of degrees, and/or fulfillment of transfer requirements. The course sequence may include course prerequisites and other placement requirements. Students are advised to meet with an Orange Coast College Counselor to review course selections and sequences to ensure that completion of this program will meet a student's transfer and career goals.

Course	Title	Units
Year 1		
Semester 1		
AS MAJOR COUF MRSC, PHYS (Se	3-5	
OCC AS GE AREA A1- CHOOSE ONE		3
OCC AS GE AREA	OCC AS GE AREA C1- CHOOSE ONE	
OCC AS GE AREA D- CHOOSE ONE		3
OCC AS GE AREA C2- CHOOSE ONE		3
	Units	15-17
Semester 2		
	following or satisfy Math competency igh School Algebra 2 with a "C" or better)	3-4
MATH A030 or MATH A0	Intermediate Algebra ¹ 045 or Combined Elementary and Intermediate Algebra	
AS MAJOR COUF MRSC, PHYS (Se	3-5	
OCC AS GE AREA A2- CHOOSE ONE ²		3-4
ELECTIVE (DEGREE APPLICABLE)		3
	Units	12-16
Year 2		
Semester 1		
	RSE: ASTR, BIOL, CHEM, ECOL, ESEC, GEOL, e Requirements for Courses)	3-5
ELECTIVE (DEGR	EE APPLICABLE)	12
	Units	15-17
Semester 2		
AS MAJOR COUF MRSC, PHYS (Se	3-5	
AS MAJOR COUF MRSC, PHYS (Se	0-6	
ELECTIVE (DEGR	15	
	Units	18-26
	Total Units	60-76

Math A030 or higher OR take 3-4 degree applicable elective units if math competency was met through completion of High School Algebra 2 with a "C" or better; *100-level Math courses satisfy AS Math Requirement and OCC AS GE AREA A2

2

OCC AS GE AREA A2 - Required if 100-level MATH will not be taken to meet Math competency. If MATH A100 or higher will be taken, then needs to take 3-4 degree applicable elective units

3

TO REACH MINIMUM 18 UNITS OF MAJOR

4

VARIES TO REACH MINIMUM 60 DEGREE APPLICABLE UNITS