# BIOLOGICAL SCIENCES - ASSOCIATE IN SCIENCE

Plan Code: 2500

This Associate Degree will provide the student with an introductory education to this field of study, not necessarily career related, but ending with the Associate Degree or a partial lower division preparation for transfer to a Baccalaureate Degree in the biological sciences.

## **Program Student Learning Outcomes**

- Demonstrate the ability to attain the Institutional Student Learning Outcomes (ISLOs).
- Assimilate information from various sources and apply critical thinking to form evidence-based conclusions (scientific method) to issues in the realm of biology, health, and as a consumer in society.
- Demonstrate an understanding of all levels of organismal biology such as morphological, physiological, and developmental.
- Demonstrate knowledge of the importance of the diversity of organisms on earth and their ecological and evolutionary relationships including human impact on other organisms (or the reciprocal) and ecosystems.

## **Program Requirements**

This degree requires the completion of General Education coursework plus the following:

Code Number REQUIRED COURSE	Course Title S	Units	
CHEM 2	Elementary Chemistry	4.5-5	
or CHEM 3	Intro to Gen, Organic and Biochemistry		
LEARN 11/11H	Learning and Academic Strategies	3	
or READ 84	Analytical Reading		
STAT 1/1H	Elementary Statistics	4	
Subtotal Units		11.5-12	
IN ADDITION, complete ONE Area of Emphasis below:			
Marine Science E	mphasis		
Terrestrial and Sustainability Emphasis			
Health Science Emphasis			
Subtotal Units		15-23	
Required Subtotal		26.5-35	
Complete one of the following: 1		19-39	
	ucation (Plan A) (https://lbcc- .com/academic-requirements/general-		

LBCC General Education (Plan A) (https://lbcc-public.courseleaf.com/academic-requirements/general-education-transfer-degree-certificate-requirements/general-education-plans/plan-a/)

CSU GE Breadth (Plan B) (https://lbcc-public.courseleaf.com/academic-requirements/general-education-transfer-degree-certificate-requirements/general-education-plans/plan-b/)

IGETC Pattern (Plan C) (https://lbcc-public.courseleaf.com/academic-requirements/general-education-transfer-degree-certificate-requirements/general-education-plans/plan-c/)

Electives (as needed to reach 60 degree-applicable units) <sup>2</sup>

Minimum Degree Total

- Units for the major may be double-counted for LBCC GE, CSU GE, or IGETC; see counselor for limitations.
- <sup>2</sup> Elective units from course(s) numbered 1-599, if needed, to reach 60 degree-applicable units.

#### **Marine Science Emphasis**

Code Number	Course Title	Units
BIO 11	Environmental Problems of Man	3
BIO 20/20H	Marine Biology	4
BIO 22	The Marine Environment	3
GEOL 2	General Geology, Physical	3
PGEOG 2	Weather and Climate	3
Subtotal Units		16

### **Terrestrial and Sustainability Emphasis**

Code Number	Course Title	Units
BIO 5	Plant Biology	4
BIO 11	Environmental Problems of Man	3
BIO 30	Wildlife Biology	4
GEOL 1/1H	General Physical Geology	4.5
GEOG 10	Intro to Geographic Information Systems	3
PGEOG 2	Weather and Climate	3
Subtotal Units		21.5

#### **Health Science Emphasis**

60

Code Number	Course Title	Units
Complete NINE to FOURTEEN (9-14) units from the following:		
ANAT 1	Human Anatomy (4)	
ANAT 41	Anatomy & Physiology (5)	
BIO 2	General Microbiology (5)	
BIO 60	Human Biology (4)	
PHYSI 1	Human Physiology (5)	
IN ADDITION, complete SIX to NINE (6-9) units from the following:		
AH 60	Medical Terminology (3)	
BIO 25	Biology and Society (3)	
BIO 61	Introduction to Pathophysiology (3)	
COMM 25	Elements of Intercultural Communication (3)	
PSYCH 1/1H	Introduction to Psychology (3)	
Subtotal Units		15-23