

# BIOLOGY - GENERAL - ASSOCIATE OF SCIENCE DEGREE (AS)

Explore More About This Program: <https://cwi.edu/program/biology>

## Plan of Study Guide

*The course sequence listed below is strongly recommended in order to complete your program requirements. Please register for each semester as shown using the Student Planning tool in myCWI. Plans may be modified to fit the needs of part-time students by adding additional semesters. Consult your Student Success Advisor for any questions regarding this course sequence plan.*

### First Year

Fall		Credit Hours
BIOL 111	Biology I (GEM 4)	3
BIOL 111L	Biology I Lab (GEM 4)	1
Select one of the following options (GEM 4):		4
Option 1:		
CHEM 101	Introduction to Chemistry <sup>1</sup>	
CHEM 101L	Introduction to Chemistry Lab <sup>1</sup>	
Option 2:		
CHEM 111	General Chemistry I <sup>1</sup>	
CHEM 111L	General Chemistry I Lab <sup>1</sup>	
CWI 101	Connecting With Ideas	3
Select one of the following (GEM 3):		3-5
MATH 143	College Algebra	
MATH 147	College Algebra and Trigonometry	
MATH 160	Survey of Calculus	
MATH 170	Calculus I	
<b>Total Semester Credit Hours</b>		<b>14</b>
<b>Spring</b>		
BIOL 112	Biology II <sup>2</sup>	3
BIOL 112L	Biology II Lab <sup>2</sup>	1
ENGL 101	Writing and Rhetoric I (GEM 1)	3
SCIE 102	Ethics in Science (GEM 6) <sup>3</sup>	3
<u>GEM 5 - Humanistic &amp; Artistic Ways of Knowing course</u>		3
<u>Global Perspectives course</u>		3
<b>Total Semester Credit Hours</b>		<b>16</b>

### Second Year

Fall		Credit Hours
Select one of the following options:		4
Option 1:		
BIOL 113	Biology III: Principles of Structure and Function <sup>4</sup>	
BIOL 113L	Biology III: Principles of Structure and Function Lab <sup>4</sup>	
Option 2:		
ENVI 260	General Ecology <sup>4</sup>	
ENVI 260L	General Ecology Lab <sup>4</sup>	
CHEM 111	General Chemistry I <sup>5</sup>	3
CHEM 111L	General Chemistry I Lab <sup>5</sup>	1
ENGL 102	Writing and Rhetoric II (GEM 1)	3

GEM 5 - Humanistic & Artistic Ways of Knowing course <sup>6,7</sup>		3
<b>Total Semester Credit Hours</b>		<b>14</b>
<b>Spring</b>		
Select one of the following:		3-4
BIOL 280	Pathophysiology <sup>7</sup>	
ENVI 280L	Field Biology <sup>7</sup>	
MMBS 280 & 280L	Genetics and Genetics Lab <sup>7</sup>	
GEM 2 - Oral Communication course		2
GEM 6 - Social & Behavioral Ways of Knowing course <sup>6</sup>		3
Major Electives	Select 5-12 credits from the list below to bring the total credits earned to 60 <sup>4,8</sup>	5-12
<b>Total Semester Credit Hours</b>		<b>16</b>
<b>Minimum Credit Hours Required</b>		<b>60</b>

- <sup>1</sup> Students who have prior experience with chemistry are strongly encouraged to take the Chemistry Placement exam at the CWI Assessment Center. Passing the Chemistry Placement exam will allow students to register directly into CHEM 111 General Chemistry I and will enable them to complete additional credits from the Major Electives list.
- <sup>2</sup> BIOL 112 and BIOL 112L are best taken within a semester of completing BIOL 111 and BIOL 111L to ensure greater success.
- <sup>3</sup> This course fulfills the Ethical Reasoning requirement for an associate degree from CWI.
- <sup>4</sup> BIOL 113 and BIOL 113L are not offered on a consistent basis. ENVI 260 and ENVI 260L are only offered in Fall. Depending on your start term and desired course, you may choose to take a course from the Major Electives list in your third semester and the major requirement in your fourth semester.
- <sup>5</sup> If CHEM 111 General Chemistry I was completed to fulfill your GEM 4 requirement, you should complete four (4) credits of coursework from the Major Electives course list instead.
- <sup>6</sup> Course must come from a different discipline.
- <sup>7</sup> ENVI 280L, MMBS 280 and MMBS 280L are only offered in spring. Depending on your start term, you may be required to take your capstone course in your third semester and the GEM 5 course in your fourth semester.
- <sup>8</sup> See catalog and possible transfer institution for elective options. To determine which elective is appropriate, consult your advisor and refer to the applicable 2+2 guide.

## Biology - General: Major Electives

Course	Course Title	Min Credits
BIOL 104	Professions in Biology	3
BIOL 113	Biology III: Principles of Structure and Function	3
BIOL 113L	Biology III: Principles of Structure and Function Lab	1
BIOL 280	Pathophysiology	4
BIOL 293	Biology Internship	1-3
CHEM 112	General Chemistry II	3
CHEM 112L	General Chemistry II Lab	2
CHEM 253	Quantitative Analysis	3
CHEM 253L	Quantitative Analysis Lab	2
ENGL 202	Technical Communication	3
ENVI 100	Environmental Science	3
ENVI 100L	Environmental Science Lab	1
ENVI 260	General Ecology	3
ENVI 260L	General Ecology Lab	1
ENVI 280L	Field Biology	3
MATH 144	Trigonometry	2
MATH 147	College Algebra and Trigonometry	5
MATH 153	Statistical Reasoning	3
MATH 170	Calculus I	5
MATH 175	Calculus II	4
MMBS 250	General Microbiology	3
MMBS 250L	General Microbiology Lab	1

MMBS 260	Introduction to Cell Biology	3
MMBS 260L	Introduction to Cell Biology Lab	1
MMBS 270	Introduction to Pharmacology	3
MMBS 280	Genetics	3
MMBS 280L	Genetics Lab	1
PHYS 111	General Physics I	3
PHYS 111L	General Physics I Lab	1
SCIE 225	Essential Principles of Scientific Research	1