

## ASSOCIATE OF APPLIED SCIENCE

# **BIOTECHNOLOGY**

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-06.

1150

1718 Catalog

Effective Summer 2017

Arts and Sciences Division

Biology Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
BIO241	General Genetics (lab) ▲-	4	BIO141	
BIO242	Cell & Molecular Biology (lab) ▲+	4	BIO141	
BST120	Introduction to Biotechnology A-	1		
BST121	Basic Biotechnology Methods (lab)	1	Pre-Co-BST120	
BST122	Advanced Biotechnology Methods^(lab) ▲+	3	BST121 <b>and</b> (MTH093 and MTH094) <b>or</b> Proficiency	
BST221	Cell and Tissue Culture (lab) (1st 8-weeks) ▲-	2	BST122	
BST225	Biotechnology Instrumentation (lab) (2 <sup>nd</sup> 8-weeks) ▲-	2	BST122	
BST240	Bioinformatics (lab) ▲+	3		
BST250	Bioprocess and Manufacturing (lab) ▲+	3	BST122	
ENV125	Intro to HAZ Mat and Waste Management	1		
ENV221	OSHA 40 hour HAZWOPER	2		
ITD122	Computer Applications for Professionals	3	ITD100 or Proficiency	
SCI273	Special Topics in Science	3	Sophomore in program	
	Total	32		
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	Take first semester	
ENG124	College Composition^	3	ENG011 or Proficiency	
ENG221	Technical Report Writing	3	ENG124	
MTH125 <b>or</b> MTH124	College Algebra^ or Statistics	4 <b>or</b> 3	Check for prerequisites	
BIO141	General Biology I (lab)	4		
BIO221	Principals of Microbiology	4	BIO141 or BIO122 or BIO123	
CHM141	General Chemistry I (lab) ▲	5	CHM101 or Proficiency	
CHM142	General Chemistry II (lab)	5	CHM141	
PHL122	Ethics	3		
	Total	31-32		
TOTAL CREDIT HOURS				

<sup>^</sup> Based on SSC placement scores

<sup>^^</sup> To promote student success, this course should be taken in the first semester

<sup>▲</sup> Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, or those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup>Spring only courses. Please see your academic advisor for availability.

## Effective Summer 2017

## FULL-TIME STUDENT ADVISING NOTES

### **Academic Advising**

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

#### Course Sequence

The semester-by-semester listing below provides the normal scheduling option for full-time associate degree students who plan to finish in two years.

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
ITD122	Computer Applications for Professionals	3	ITD100 or Proficiency
ENG124	College Composition^	3	ENG011 or Proficiency
ENV125	Intro to HAZ Mat and Waste Management	1	·
BIO141	General Biology I (lab)	4	
BST120	Introduction to Biotechnology ▲-	1	
BST121	Basic Biotechnology Methods (lab)	<u>1</u>	Pre-Co-BST120
		14	
Second Semester			
MTH125	College Algebra^	4	
or	or	or	Check for prerequisites
MTH124	Statistics	3	
ENG221	Technical Report Writing	3	ENG124
ENV221	OSHA 40 hour HAZWOPER	2	
BIO221	Principles of Microbiology	4	BIO141 or BIO122 or BIO123
BST122	Advanced Biotechnology Methods^(lab) ▲+	<u>3</u>	BST121 <b>and</b> (MTH093 and MTH094) <b>or</b> Proficiency
		15-16	,
<u>Summer</u>			
PHL122	Ethics	3	PHL122
SCI273	Special Topics in Science		Sophomore in program
		<u>3</u> <b>6</b>	
Third Semester			
BIO241	General Genetics (lab) ▲-	4	BIO141
CHM141	General Chemistry I (lab) ▲	5	CHM101 or Proficiency
BST221	Cell & Tissue Culture (lab) (1 <sup>st</sup> 8-weeks) ▲-	2	BST122
BST225	Biotechnology Instrumentation (lab) (2 <sup>nd</sup> 8-weeks) ▲-	<u>2</u>	BST122
	(= 0)	13	
Fourth Semester			
BST240	Bioinformatics ▲+	3	
BST250	Bioprocesses and Manufacturing (lab) ▲+	3	BST122
BIO242	Cell and Molecular Biology (lab) ▲+	4	BIO141
CHM142	General Chemistry II (lab)	<u>5</u>	CHM141
	• • • •	15	
	TOTAL CREDITS	63-64	

<sup>^</sup> Based on SSC placement scores

<sup>^^</sup> To promote student success, this course should be taken in the first semester

<sup>▲</sup> Because of the strong emphasis on science in this major, applicants must have successfully completed chemistry and biology in high school. Students who did not complete the courses in high school, or those who prefer to refresh their knowledge of the material, should complete the listed pre-requisites.

<sup>▲-</sup>Fall only courses. Please see your academic advisor for availability.

<sup>▲+</sup>Spring only courses. Please see your academic advisor for availability.