

BIOTECHNOLOGY OPTION – X012**A.A. in Arts and Science**

Contact: James Knapp, 413-552-2398, jknapp@hcc.edu

COURSE TITLE	COURSE NUMBER	PREREQUISITES	CREDITS	SEMESTER TAKEN	GRADE
GENERAL EDUCATION REQUIREMENTS			35		
Language and Literature I	ENG 101	Appropriate score on Placement Tests, or C- or better in ENG 097 and ENG 098, or C- or better in ENG 096 or ENG 099 4 class hours	3		
Language and Literature II	ENG 102	ENG 101	3		
Introduction to Macroeconomics (B)	ECN 101	ECN 100 with a grade of C- or better or eligible for MTH 095	3		
Social Science Electives (B)			3		
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Ethics	PHI 120		3		
Introduction to Electronic Media (C)	COM 111		3		
Humanities Elective (C)			3		
Biology Today I or Introduction to Cell Functions	BIO 103 BIO 100	Note: Credit cannot be received for more than one of these - BIO 100, 103	4		
Biology Today II	BIO 104	BIO 100 or 103	4		
Statistics	MTH 142	MTH 097, MTH 082 or MTH 095 with a grade of C- or better or adequate score on the Mathematics Placement Examination	3		
PROGRAM ELECTIVES (Select 7 from the following)			25		
Introduction to Biotechnology	BIO 106	BIO 100 or BIO 103 or BIO 110 or BIO 120 and MTH 095 eligible.	4		
Microbiology	BIO 229	A grade of C or better in BIO 100 or 103 or 107, or a grade of C- or better in VET 133	4		
Directed Literature Study in Biology	BIO 207		1		
Principles of Chemistry I or Inorganic Chemistry I	CHM 113 CHM 121	In order to obtain graduation credit for this course, the student must successfully complete CHM 102 or CHM 114 or CHM 124 High School Algebra I or equivalent. High School Chemistry recommended. Note: In order to obtain graduation credit for this course, the student must successfully complete CHM 102 or CHM 114 or CHM 124	4		
Principles of Chemistry II or Inorganic Chemistry II	CHM 114 CHM 124	CHM 113 or equivalent. High School Algebra I or equivalent recommended CHM 113 or CHM 121	4		
Organic Chemistry I (Fall)	CHM 221	CHM 124, 114, or 102 with permission of instructor	4		
Organic Chemistry II (Spring)	CHM 222	CHM 221 or one previous semester of organic chemistry	4		
College Algebra	MTH 104	MTH 082 or MTH 095 or MTH 097 with a grade of C- or better or adequate score on the Mathematics Placement Examination	4		
Topics in Science	SEM 130		4		
Total Credits			60		

PROGRAM OVERVIEW

This program is intended for the student who is interested in pursuing a baccalaureate degree in the life sciences utilizing the basic principles of biotechnology. This technology is based on recent advances in the discipline of recombinant DNA technology. Students completing the option will have acquired the necessary laboratory skills and theoretical background for transfer to other state or private colleges. Career and research opportunities include, but are not limited to, animal sciences, agrigenetics, immunogenetics, pharmaceuticals, biomedical technologies, forensics and environmental sciences.

NOTES:

This program qualifies for MassTransfer, which guarantees credit transfer to Massachusetts state colleges universities. MassTransfer also will grant students automatic acceptance to certain state colleges and universities by achieving the minimum grade point average and the HCC degree.