

BIOTECHNOLOGY DEGREE – M145

Associate of Applied Science Degree (AAS)

CATALOG DESCRIPTION OF PROGRAM:

Students develop science laboratory technical skills in preparation for employment under the supervision of professional scientists in a variety of laboratory settings. The program can also serve as the first two years of preparation for a four-year school with a major in physical or biological sciences. The second year prepares students for employment in research, chemical, medical, or scientific labs and/or aquariums and zoos. On-the-job experiences are often available. The Biotechnology Program includes a state-of-the-art technical research experience provided by local biotechnology institutes and research facilities such as the University of Maryland, Johns Hopkins University, UMB BioPark researchers and local biotechnology companies.

COURSE	CURRENT SEQUENCE	CREDITS	PREREQUISITES	SEMESTER	GRADE
1st Semester					
PRE 100	Preparation for Academic Achievement	1	None		
	Computer Literacy Exam	0			
BTC 103	Special Topics in Biotechnology I	3	None		
CHE 101	General Chemistry I	4	MAT 82 or MAT 92 and ENG 82 or RENG 92		
BIO 102	Principles of Biology	4	MAT 81 or MAT 91 and ENG 82 or RENG 92		
MAT 128	Pre-Calculus I	4	MAT 82 or MAT 92; ENG 82 or RENG 92		
Semester Credits		16			
2nd Semester					
BTC 104	Special Topics in Biotechnology II	3	None		
BTC 105	Techniques and Instrumentation for Biotech.	4	CHE 101; BIO 102		
CHE 102	General Chemistry II	4	CHE 101		
ENG 101	English Writing	3	ENG 82 or RENG 92		
HLF-Elective	Health and Life Fitness	1	None		
Semester Credits		15			
3rd Semester					
BIO 212	Microbiology	4	6-8 credits in biology and/or chemistry		
BTC-Elective	Biotechnology Elective	4	Depends on course chosen		
ENG 102	Intro. To Term Paper & Research Methods	3	ENG 101		
MAT 107	Modern Elementary Statistics	3	MAT 86 or MAT 91 and RENG 92		
Semester Credits		14			
4th Semester					
BIO 207	Genetics	4	CHE 101		
BIO 199	Individual Study in Biology	4	None		
HLF-Elective	Health and Life Fitness	1	None		
AH-Elective	Gen. Ed. Requirement: Arts & Humanities	3	Depends on course chosen		
SBS-Elective	Gen. Ed. Req.: Social & Behavioral Sciences	3	Depends on course chosen		
Semester Credits		15			
PROGRAM TOTAL		60			

Advisor Signature: _____

Date: _____

Student Signature: _____

Date: _____

Pre-Requisites for Students in Developmental Courses

COURSE	CURRENT SEQUENCE	CREDITS	PREREQUISITES	SEMESTER	GRADE
RENG 90	Intensive Program Writing	4 hrs.	Placement Test		
RENG 91	Composition Skills I	4 hrs.	Placement Test or RENG 90		
RENG 92	Composition Skills II	4 hrs.	Placement Test or RENG 91		
MAT 80	Arithmetic	3 hrs.	Placement Test		
MAT 86/	Integrated Pre-Algebra and Introductory Algebra	5 hrs.	Placement Test or MAT 80 Students who complete MAT 80 with an A or B within a one year period; Students who recently (within one year) failed and need to repeat MAT 91; students whose ACUPLACER placement score on Elementary Algebra falls within the range 52-62.		
MAT 87M	Integrated Elementary and Intermediate Algebra				
MAT 91	Elementary Algebra	4 hrs.	Placement Test or MAT 80		
MAT 92	Intermediate Algebra	4 hrs.	Placement Test or MAT 91		