



Northeastern University

College of Professional Studies

Transfer Articulation Guide

Roxbury Community College AS Biotechnology to Northeastern University College of Professional BS Biotechnology

Roxbury Community College, AS in Biotechnology Courses			Northeastern University College of Professional Studies, BS in Biotechnology Equivalencies		
First Semester					
ACS 102	The College Experience	3		Non-Transferable	0
MAT 103	Pre-Calculus	4	MTH 1200 + MTH 1990	Pre-Calculus + MTH Elective (<i>Open Elective</i>)	4
ENG 101	English Composition I	3	ENG 1105 + ENG 1106	College Writing I + Writing Lab I	3
SCI 103	Biology I	4	BIO 1100 + BIO 1101	Principles of Biology I + Lab	4
SCI 123	Principles of Chemistry I	4	CHM 1100 + CHM 1101	General Chemistry I + Lab	4
Second Semester					
IST 120	Microcomputer Applications	3	ITC 1000	Computer Applications	3
SCI 104	Biology II	4	BIO 1200 + BIO 1201	Principles of Biology II + Lab	4
ENG 102	English Composition II	3	ENG 1107 + ENG 1108	College Writing II + Writing Lab II	3
SCI 124	Principles of Chemistry II	4	CHM 1200 + CHM 1201	General Chemistry II + Lab	4
Third Semester					
<i>SSI Elective</i> Take SSI 103	US History I	3	HST 1200	American History I: Pre-Contact to Civil War (<i>DD Core</i>)	3
SCI 206	Biomanufacturing I	4	BTC 1300 + BTC 1990	Introduction to Biotechnology + BTC Elective	4
SCI 204	Microbiology w/Lab	4	BIO 2100 + BIO 2101	Microbiology + Lab	4
MAT 111	Mathematics for Technology	3	MTH 1900	Math Elective (<i>Open Elective</i>)	3
Fourth Semester					
SCI 207	Biomanufacturing II	4	BTC 2990	BTC Elective (<i>Major Elective</i>)	4
<i>SSI Elective</i> Take SSI 124 or SSI 101	Intro to Cultural Anthropology or World History I	3	ANT 1150 or HST 1100	Cultural Anthropology or History of the World 1: Prehistory to the Renaissance (<i>IC and SI Core</i>)	3
<i>HUM/ENG/LAN</i> Take any	HUM/ENG/LAN Elective	3		(<i>Open Elective</i>)	3
Fifth Semester					
<i>HUM/ENG/LAN</i> Take HUM 163	Photography I	3	ART 1200	Intro to Digital Photography (<i>EI Core</i>)	3
SCI 208	Techniques in Molecular Biology	4	BIO 2500 + BIO 2501	Genetics and Molecular Biology + Lab	4
SCI 298	Internship in Biotechnology	3	BTC 2990	BTC Elective (<i>Major Elective</i>)	3

BS in Biotechnology Courses to be taken at CPS

General Foundation			
Course Number	Title	Credits	Pre-Requisites
ENG 3105	Writing for the Professions-Sci and Eng	3	ENG 1105 + ENG 1106 ; co-requisite ENG 3106
ENG 3106	Lab for Writing for the Professions-Sci and Eng	1	ENG 1105 + ENG 1106; co-requisite ENG 3105
General Foundation Total		4	
Biology Foundation			
MTH 2310	Statistics for the Social and Behavioral Sciences	3	MTH 1100, MTH 1200, or MTH 2100
MTH 2100	Calculus I	3	MTH 1200
MTH 2105	Calculus II	3	MTH 2100
PHY 1200 + PHY 1201	Physics I and Lab	4	MTH 2100
PHY 2200 + PHY 2201	Physics II and Lab	4	MTH 2100
PHL 2140	Ethical Issues in Sci and Eng	3	
Biology Foundation Total		20	
Major Required Courses			
CHM 2110 + CHM 2111	Organic Chemistry I and Lab	4	CHM 1200 + CHM 1201
CHM 2210 + CHM 2201	Organic Chemistry II and Lab	4	CHM 2110 + CHM 2111
CHM 2300 + CHM 2301	Analytical Chemistry	4	CHM 1200 + CHM 1201
BIO 2300	Cell Biology	3	BIO 1200 + BIO 1201
BIO 3100 + BIO 3101	Biochemistry and Lab	4	BIO 1200 + BIO 1201
BTC 4450	Quality Control and Validation Issues	3	BTC 1300 and MTH 2310
BTC 4850	Biological Sciences Senior Project	3	BIO 2300 and BIO 2500
Major Required Courses Total		25	
Major Electives: Choose 1			
BIO 1600 + BIO 1601	Human Anatomy and Physiology I and Lab	4	BIO 1200 + BIO 1201
BIO 1700 + BIO 1701	Human Anatomy and Physiology II and Lab	4	BIO 1600 + BIO 1601
BTC 3300	Biomaterials	3	BIO 1200 + BIO 1201
BTC 4200	Genomics, Proteomics and Bioinformatics	3	BTC 1300 + BIO 2500
BTC 4300	Biotechnology Processing	3	BTC 1300 + BIO 2300
HSC 1200	Nutrition	3	
HSC 3300	Epidemiology	3	MTH 2300, MTH 2310 or MTH 3300
HSC 3310	Pathophysiology	3	BIO 1200 + BIO 1201
HSC 3320	Pharmacology	3	CHM 1200 + CHM 1201
Major Electives Total		3-4	
Open Electives Total		7-8	
Credits to be taken at CPS		60	
Total Credits required for CPS BS Biotechnology		123	