

#### **Articulation Agreement**

# Quinsigamond Community College A.A. General Studies – Biotechnology Option to Northeastern University College of Professional Studies BS Biotechnology

- 1. This Agreement states and memorializes opportunities QCC students may have to transfer credits and experiences earned in the QCC General Studies Biotechnology Option A.A. program into the NU-CPS Biotechnology B.S. degree.
- 2. QCC students who successfully complete the General Studies Biotechnology Option A.A. program are eligible for admission into the CPS Biotechnology B.S. degree, subject to and in accordance with the limitations and procedures set forth in this Agreement.
- 3. QCC graduates who successfully complete the General Studies Biotechnology Option A.A. program with a minimum overall grade point average of 2.5 on a 4.0 scale are eligible for admission to CPS to pursue the Biotechnology B.S. degree. CPS retains the right to make the final decision on each student's application.
- 4. To be considered for the College of Professional Studies, Quinsigamond Community College students must:
  - a. Submit a completed online application and required supporting credentials to the College of Professional Studies by the posted term entry deadline.
  - b. At its discretion, CPS will evaluate courses with a grade of C or better for transfer credit toward the baccalaureate degree. Courses designated as remedial or developmental are non-transferable. Science and technology courses completed more than seven years prior to the application date may be considered for transfer at the discretion of the CPS program director.
  - c. The College of Professional Studies reserves the right to rescind an offer of acceptance if student is no longer considered in good academic standing or disciplinary sanctions occur between the times of acceptance to matriculation.
- 5. Upon acceptance into the Biotechnology B.S. degree, QCC graduates are subject to all requirements and other published standards issued by CPS, as may be amended from time to time in the sole discretion of CPS.
- 6. As a member of the Servicemembers Opportunity Colleges (SOC), CPS agrees to award up to 75% of transfer credits toward a baccalaureate degree and 70% toward a master's degree for active service members.

- 7. QCC shall permit CPS to obtain written verification, if necessary, from QCC of an applicant's eligibility for course credit transfer under this Agreement.
- 8. This Agreement shall continue until terminated by either party. Either institution may terminate this Agreement, with or without cause, provided that the terminating institution has given the other institution written notice at least 90 days prior to the effective date of such termination and further provided that no such termination shall adversely affect any student attending or accepted by CPS by virtue of the terms of this Agreement. In the event that the said Agreement is not terminated, it will automatically be extended year by year.
- 9. The parties agree that this Agreement embodies all of the agreements made by and between then supersedes any prior agreements and the understanding with regards to the acceptance of QCC students into CPS and that any modifications or amendments thereof must be in writing executed by both parties in order to be effective. The Agreement is being executed within the Commonwealth of Massachusetts and the parties agree that this Agreement shall be interpreted under the laws of said Commonwealth.



### **Transfer Articulation Guide**

## Quinsigamond Community College AA General Studies Biotechnology Option to Northeastern University College of Professional BS Biotechnology

Quinsigamond Community College, AA in General Studies-Biotechnology Curriculum			Northeastern University College of Professional Studies, BS in Biotechnology Equivalencies		
First Semester (1	4 credits)				
BIO 107	Principles of Biology I	4	BIO 1100 + BIO 1101	Principles of Biology I + Lab	4
BTT 101	Introduction to Biotechnology	3	BTC 1300	Introduction to Biotechnology	3
CHM 105	General Chemistry I	4	CHM 1100 + CHM 1101	General Chemistry I + Lab	4
ENG 101	Composition I	3	ENG 1105 + ENG 1106	College Writing I + Writing Lab I	3
Second Semester	(14 credits)				
BIO 259	Cell Biology	4	BIO 2300 + BIO 2990	Cell Biology + BIO elective	4
CHM 106	General Chemistry II	4	CHM 1200 + CHM 1201	General Chemistry II + Lab	4
ENG 102	Composition II	3	ENG 1107 + ENG 1108	College Writing II + Writing Lab II	3
MAT 123*	College Mathematics 1: Pre- Calculus	3	MTH 1990	MTH Elective	3
Third Semester (2	17 credits)				
BIO 231	General Microbiology	4	BIO 2100 + BIO 2101	Microbiology and Lab	4
BIO 260	Molecular Biology	4	BIO 2990	BIO Elective (Professional Elective)	4
MAT 122	Statistics	3	MTH 2310	Statistics for the Social and Behavioral Sciences	
SPH 101	Speech Communication Skills	3	CMN 2310		
History Elective Recommended: HST 115 or HST 116	U.S. History: Beginning to 1865 <i>or</i> U.S. History: 1865 to Present	3	HST 1200 or HST 1250	American History 1: Precontact to the Civil War or American History 2: Reconstruction to the Present (SI + DD Core)	3

Fourth Semester	(12 credits)				
BTT 211	Techniques in Biotechnology I	3	BTC 1301 + BTC 1990	Lab for BTC 1300 + BTC Elective	
MAT 124*	College Mathematics II: Trigonometry	3	MTH 1200	Precalculus	
Social Science Elective Recommended: SOC 106, SOC 115, or SOC 211	The Sociology of Difference and Inequality, Sociology of Sex and Gender, or The Dynamics of Racial and Ethnic Relations	3	SOC 1220, SOC 2340, or SOC 1230	Engaging Difference and Diversity, Gender and Work Roles, or Race and Ethnicity (IC Core)	
Humanities Elective Recommended: ENG 200 or ENG 203	Children's Literature <i>or</i> Writing Poetry	3	ENG 3210 or ENG 3220	Writing for Young Readers or Writing Poetry (El Core)	3
Fifth Semester (3	3 credits)				
BTT 212	Techniques in Biotechnology II	3	BTC 4300	Biotech and Pharmaceutical Processing	3
			Т	otal Credits Accepted for Transfer	60
			Total Trai	nsfer Credits Applied to BS Degree	60

<sup>\*</sup> QCC students who place into and complete MAT 233 Calculus I and/or MAT 234 Calculus II may substitute those courses in the General Studies-Biotechnology associate degree and have those credits apply towards Northeastern University General Foundational requirements in the BS in Biotechnology degree.

## BS in Biotechnology Courses to be taken at CPS

Course Number	Title	Credits	Pre-Requisites
ENG 3105 + ENG 3106	Writing for the Professions-Sci and Eng + Lab	4	ENG 1105 + ENG 1106 ; co-requisite ENG 3106
<b>General Foundation Total</b>	al	4	
Biology Foundation			
MTH 2100 *	Calculus 1	3	MTH 1200
MTH 2105 *	Calculus 2	3	MTH 2100
PHL 2140	Ethical Issues in Sci and Eng	3	·
ITC 1000	Computer Applications	3	
<b>Biotechnology Foundation</b>	on Total	12	
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
PHY 1200 + PHY 1201	Physics 1 and lab	4	MTH2100
PHY2200 + PHY 2201	Physics 2 and lab	4	PHY 1200 + PHY 1201
CHM 2300 + CHM 2301	21 Analytical Chemistry and Lab		CHM 1200 + CHM 1201
BIO 3100 + BIO 3101	Biochemistry and Lab	4	BIO 1200 + BIO 1201
BIO 2500 + BIO 2501	Genetics and Molecular Biology + Lab	4	BIO 1200 + BIO 1201
BTC 4450	Quality Control and Validation Issues	3	BTC 1300 + MTH 2310 or MTH 3300
BTC 4850	Biotechnology Senior Project	3	BIO 2300 and BIO 2500
<b>Major Required Courses</b>	Total	34	
Major Electives: Choose	3 semester hours from BTC, 3 semesters hours fr	om BIO, HS	C or BTC
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 2700	Cell and Tissue Culture Techniques	3	
BTC 3300	Technology of Biomaterials	3	BIO 1200 + BIO 1201
BTC 4200	Genomics, Proteomics and Bioinformatics		BTC 1300 + BIO 2500
BTC 4300	Biotechnology and Pharmaceutical Processing	3	BTC 1300 + BIO 2300
HSC 1200	1200 Nutrition		
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	6	
	Open Electives Total	7	
Credits to be taken at CPS			
Total Credits required for CPS BS Biotechnology			

#### TRANSFER ARTICULATION GUIDE REVIEWED AND APPROVED BY

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