# Northeastern University College of Professional Studies



#### **Articulation Agreement**

#### **Northern Essex Community College AS Biology**

to

#### Northeastern University College of Professional Studies BS Biotechnology

- 1. This Agreement states and memorializes opportunities NECC students may have to transfer credits and experiences earned in the NECC AS Biology program into the CPS BS Biotechnology program.
- 2. NECC students who successfully complete the AS Biology program are eligible for admission into the CPS BS Biotechnology degree, subject to and in accordance with the limitations and procedures set forth in this Agreement.
- 3. NECC graduates who successfully complete the AS Biology 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 BS Biotechnology 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, Northern Essex 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 BS Biotechnology degree, NECC 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.
- 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. 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.

8. 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 NECC 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 REVIEWED AND APPROVED BY

NORTHERN ESSEX COMMUNITY COLLEGE	A151 A
BY:	BY: Ohil M
PRINT: Lane Glerin PhD	PRINT: William Heineman, EdD
TITLE: President	TITLE: Vice President, Academic and Student Affairs
DATE:	DATE:
BY: PRINT: Carolyn Knoepfler, PhD	BY: Michael Cross, PhD
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Engineering and Math	mee. <u>Department chair, Natural Sciences</u>
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DATE: 7/11/18



#### **Transfer Articulation Guide**

### Northern Essex Community College AS Biology to Northeastern University College of Professional BS Biotechnology

#### Requirements

Northern Essex Community College, AS in Biology Courses		Northeastern University College of Professional Studies, BS in Biotechnology Equivalencies			
BIO111	Introductory Biology I	4	BIO 1100 + BIO 1101	Principles of Biology I + Lab	4
BIO112	Introductory Biology II	4	BIO 1200 + BIO 1201	Principles of Biology II + Lab	4
BIO215	General Ecology	4	ESC 1990	ESC Elective	4
BIO230	Cell Biology	4	BIO 2300 + BIO 2990	Cell Biology + BIO Elective	4
CHM121	General Chemistry I	4	CHM 1100 + CHM 1101	General Chemistry I + Lab	4
CHM122	General Chemistry II	4	CHM 1200 + CHM 1201	General Chemistry II + Lab	4
ENG101	English Composition I	3	ENG 1105 + ENG 1106	College Writing I + Writing Lab I	3
ENG102	English Composition II	3	ENG 1107 + ENG 1108	College Writing II + Lab	3
CHM221	Organic Chemistry I	4	CHM 2110 + CHM 2111	Organic Chemistry I + Lab	4
CHM222	Organic Chemistry II	4	CHM 2210 + CHM 2201	Organic Chemistry II + Lab	4
MAT251	Calculus 1	4	MTH 2100 + MTH 2990	Calculus I + MTH Elective	4
MAT252	Calculus 2	4	MTH 2105 + MTH 2990	Calculus II + MTH Elective	4



## **Electives**

Northern Essex Community College,  AS in Biology Courses			Northeastern University College of Professional Studies, BS in Biotechnology Equivalencies		
Social Science Electives Behavioral Science, Social Science, Economics, History, Government Recommended Social Science Electives: ANT101 and HIS101 or HIS102	Cultural Anthropology and US History I or US History II	6	ANT 1150 and HST 1200 or HST 1250	Cultural Anthropology (IC + SI Core) <i>and</i> American History 1 <i>or</i> American History 2 (DD Core)	6
Humanities Electives Communications, English, Fine & Performing Arts, Graphic Arts, Liberal Arts/Humanities, Literature, Philosophy & Religion Recommended Humanities Electives: ENG113 and Any other qualified course	Creative Writing: Non- Fiction <i>and</i> HUM Elective	6	ENG 3240 and Elective	Writing Nonfiction (El Core) and Open Elective	6
Biology Electives BIO108 or higher except BIO115. Student may also take SCI200 for 3 credits to fulfill this requirement. Recommended Biology Elective: BIO220	Microbiology	4	BIO 2100 + BIO 2101	Microbiology + Lab	4
Total Credits Com	pleted at Northern Essex Community College	62	Tota	al Credits Accepted for Transfer	62
	,		Total Transfe	er Credits Applied to BS Degree	62

## BS in Biotechnology Courses to be taken at CPS

Course	Title	Credits	Pre-Requisites
Number	1,1,10		*
ENG 3105 + ENG 3106	Writing for the Professions-Sci and Eng	4	(ENG 1103 + ENG 1104) or (ENG 1105 + ENG 1106)
<b>General Foun</b>	dation Total	4	
Biotechnology	y Foundation		
MTH 2310	Statistics for the Social and Behavioral Sciences	3	MTH 1100, MTH 1200, or MTH 2100
PHY 1200 + PHY 1201	Physics 1 + Lab	4	MTH 2100, MTH 2105, or MTH 2110
PHY 2200 + PHY 2201	Physics 2 + Lab	4	PHY 1200 + PHY 1201
ITC 1000 <i>or</i> ITC 2016	Computer Applications <i>or</i> End User Data Analysis Tools	3	
PHL 2140	Ethical Issues in Sci and Eng	3	
Biotechnology	Foundation Total	17	
Major Require	ed Courses		
BTC 1300	Introduction to Biotechnology	3	BIO 1200 + BIO 1201
CHM 2300 + CHM 2301	Analytical Chemistry + Lab	4	CHM 2110 + CHM 2111
BIO 2500 + BIO 2501	Genetics and Molecular Biology + Lab	4	BIO 1200 + BIO 1201
BIO 3100 + BIO 3101	Biochemistry + 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
Major Require	ed Courses Total	21	
Product St. Programme Co.	es: Complete a minimum of 9 credits from BIO, BTC	, or HSC c	ourses.
BIO 1600 + BIO 1601	Human Anatomy and Physiology I + Lab	4	BIO 1200 + BIO 1201
BIO 1700 + BIO 1701	Human Anatomy and Physiology II + Lab	4	BIO 1600 + BIO 1601
BIO 4215	Human Parasitology	3	BIO 1200 + BIO 1201
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	9	
	Open Electives Total	10	
	Credits to be taken at CPS	61	
	Total Credits required for CPS BS Biotechnology	123	