

The City University of New York
Articulation Agreement

Agreement Initiated by (College): Kingsborough Community College (KCC)
 and Brooklyn College (BC), The City University of New York.

Sending College: Kingsborough Community College

Department: Biological Sciences

Program: Biotechnology.

Degree: A.S. in Biotechnology.

Receiving College: Brooklyn College

Department: Biology

Program: Biology

Degree: BA and BS in Biology

Admissions Requirements to Senior College Program (e.g., minimum GPA, audition/portfolio):

Minimum GPA 2.0 (C)

Completion of the A.S. degree. Pursuant to University policy, students who have earned a City University Associate in Science (A.S.) degree will be deemed to have automatically fulfilled the lower division liberal arts and science distribution requirements for a baccalaureate degree (Core Studies plus English composition and Speech at Brooklyn College). However, students may be asked to complete a course in a discipline required by Brooklyn College's Core requirements that was not part of the student's associate degree program. In such cases, any coursework required will be applied towards the total number of credits normally required for the baccalaureate degree.

Also, graduates of the A.S. degree program who have not completed at least one year of foreign language study (or established an equivalent proficiency) may be asked to complete six (6) to eight (8) credits of foreign language coursework (or establish an equivalent proficiency) in addition to their normal degree requirements. Proficiency may be established based upon high school coursework, native language abilities, or examination.

Total transfer credits granted toward the Baccalaureate degree: 60

Total additional credits required at the Senior College to complete Baccalaureate degree: 60

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SENIOR COLLEGE UPPER DIVISION COURSES REMAINING FOR BACCALAUREATE DEGREE

B.S. in Biology

Course and Title **Credits**

General Education (Liberal arts, Core, Distribution) and other Required Courses

Two Core Curriculum upper-tier courses (to be determined)	6
Modern Language, if necessary	0-9
One Writing Intensive Course (preferably in the major)	0-3
Sub-total	6-18

Prerequisite and Major Courses

BIO 38 Evolution and Ecology	2 cr
BIO 45 Organismic Biology II (Animal)	2 cr
BIO 45.1 Animal Form and Function Lab	2 cr
CHEM 51, 52 –Organic Chemistry I and II	5 cr
Math 2.9 Precalculus Mathematics	3 cr
Math 3.3 Calculus I	3 cr
<i>Subtotal</i>	<i>17 cr</i>

May need to take if not taken at KCC:

BIO 52 – Microbiology (waived for students completing KCC BIO 50)	2 cr
BIO 52.2 – General Microbiology Lab (waived for students completing KCC BIO 50)	and/or
BIO 58 – Genetics (waived for students completing KCC BIO 59)	2 cr
<i>Subtotal</i>	<i>2-4 cr</i>

24 Credits Electives from the following

BIO 15 – Field Studies in Botany 4 credits	
BIO 25 – Field Studies in Zoology 4 credits	
BIO 26 – Developmental Biology Lecture 3 credits	
BIO 27.5 – Molecular Biology of Development 4 credits	
BIO 33 – Bioinformatics 2 credits (not open to students completing KCC Bio/CIS 60)	
BIO 39.1 – Cell Culture Techniques 3 credits (not open to students completing KCC BIO 57)	
BIO 55.1 – Recombinant DNA Lecture 3 credits (not open to students completing KCC BIO 56)	
BIO 62.5 – Ecology 4 credits	
BIO 73.1, 73.2 –Research I and II (or 83.1, 83.2 – Departmental Honors Courses) 3 credits each	
<i>Subtotal</i>	<i>24 cr</i>

Additional electives to complete 60 cr requirement for the degree 0-11 cr

TOTAL 60 cr

COURSE TO COURSE EQUIVALENCIES AND TRANSFER CREDIT AWARDED

<u>Sending College</u>		<u>Receiving College Equivalent (or Other Evaluation)</u>		<u>Credit</u>
<u>Course & Title</u>	<u>Cr.</u>	<u>Course & Title</u>	<u>Cr.</u>	<u>Granted</u>
General Education (Liberal Arts, Core, Distribution) Courses *				
ENG 01200 -- Freshman English I	-- 4 cr	Block credit		4 cr
ENG 02400 -- Freshman English II	--3 cr	Block credit		3 cr
HPE 01200 -- Foundations of Health and Physical Education	--3 cr	H&NTR 6.1		3 cr
Only nine credits from Groups I - IV below:		Only 9 credits to be completed from the four group credits below:		
Group I. Performing and Visual Arts.	3 cr	Block credit		3 cr
Group II. Language and Literatures.		Block credit		3 cr
Group III. Social Sciences.		Block credit		3 cr
Group IV. Behavioral Sciences.		Block credit		3 cr
SUBTOTAL				19 cr
Specific Program Requirements (Including Prerequisites)				
A.S. in Biotechnology		B.A. in Biology or B.S. in Biology		
BIO 13 General Biology I	-- 4 cr	BIO 29. Organismic Biology I	2 cr	2 cr
BIO 14 General Biology II	-- 4 cr	BIO 34. Animal Physiology or BIO 34.1 Comparative Physiology	2 cr 2 cr	2 cr
BIO 50 General Microbiology	-- 4 cr	BIO 52 Microbiology BIO 52.2 General Microbiology Lab for BIO 50	2 cr 2 cr	4 cr or
or BIO 59 Genetics	-- 4 cr	or BIO 58 Genetics, as appropriate.	2 cr	2 cr
BIO 56 Recombinant DNA Biotechnology or BIO 57 Cell & Tissue Culture, and Cell Cloning	-- 4 cr	BIO 55.1 Recomb DNA 3 cr/ Equivalent to KCC BIO 56 or BIO 39.1 Cell Techniques 3 cr/Equivalent to KCC BIO 57	3 cr 3 cr	3 cr or 3 cr
BIO 63 Molecular and Cellular Biology	-- 4 cr	BIO 17 Cell and Molecular Biology, & BIO 17.1 Eukaryotic Cell Biology and Physiology Lab	2 cr 2 cr	2 cr 2 cr
CHM 11 General Chemistry I	-- 4 cr	CHEM 1 General Chemistry I		4 cr
CHM 12 General Chemistry II	-- 4 cr	CHEM 2 General Chemistry I		4 cr
MAT 20 Elements of Statistics	-- 3 cr			
BIO/CIS 60 Bioinformatics or BA 60 or CP 11 or TEC 25 (Students electing BIO/CIS 60 take Mat 14 as prerequisite)	--3- 4 cr			
Program Guided Electives	-- 6-7 cr	Program Guided Electives		6-7 cr
SUBTOTAL				27-30 cr
Blanket credits				11-14 cr
TOTAL				60 cr

* Course equivalency information is available and kept current on the CUNY Transfer Information and Program Planning System (CUNY TIPPS) Website. Long on to TIPPS at <http://www.tipps.cuny.edu> for important information regarding the transfer of general education courses.

Procedures for reviewing, up-dating, modifying or terminating agreement:

The Chairs of the Department of Biological Sciences (KCC) and the Department of Biology (BC) or their designees will continue to communicate on an ongoing basis via email, telephone, and in person. Discussion topics will include, but are not limited to, course offerings, modifications, prerequisites, student achievements, enrollment, and course sequencing.

Procedures for evaluating agreement, e.g., tracking the number of students who transfer under the articulation agreement and their success:

The Director of Institutional Research, KCC, will forward each semester a list of students in progress and/or completed the A.S. in Biotechnology at KCC to the Chair of Biology, BC. Likewise, the Director of Institutional Research, BC, will forward each semester a list of graduates (transferred from KCC with completed A.S. in Biotechnology) in progress and/or completed the BA/BS in biology to the Chair of the Department of Biological Sciences, KCC. This will facilitate evaluation of graduates, length of time needed to complete the articulated programs, and retention/attrition rates.

Sending and receiving college procedures for publicizing agreement, e.g., college catalogs, transfer advisers, Websites, etc.:

Information regarding this jointly registered program will be made available in the college catalogues, on the department web sites and at the Admission Information Centers of both colleges. KCC will produce brochure containing information on A.S. in Biotechnology offered at KCC and its dual/jointly registered program(s) with BC. Similarly, BC in their brochure will include information on the transfer opportunity for KCC students who completed A.S. in Biotechnology to BA/BS in Biology at BC. The members of KCC who visits High Schools for the purpose of student recruitment will be given all pertinent information regarding the jointly registered A.S. in Biotechnology at KCC and transfer opportunity to BA/BS in Biology at BC. Once every semester, at least one BC faculty will visit KCC and present seminars to KCC students and provide information about the transfer opportunity for KCC students to BA/BS in Biology at BC after completing A.S. in Biotechnology at KCC.

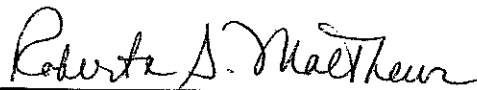
Additional Information:

A student must maintain a minimum GPA of 2.0 (C) or better at KCC in A.S. in Biotechnology to get 60 credits transferred to BA/BS in biology at BC. Courses completed at KCC with a grade of less than C will not be transferable to BC. Students who fail to maintain the minimum grade at KCC will be required to re-take the course(s) at BC in order to achieve a satisfactory grade.

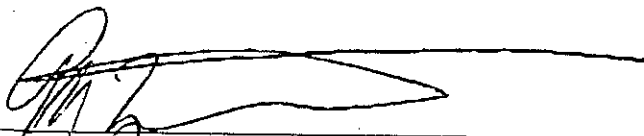
Effective Date: SEPTEMBER 2007



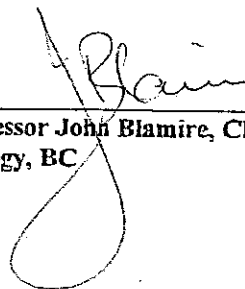
Provost Stuart Suss, Chief Academic Officer, KCC



Provost Roberta Mathews, Chief Academic Officer, BC



Professor Arthur Zeitlin, Chairperson, Department of Biological Sciences, KCC



Professor John Blamire, Chairperson, Department of Biology, BC