# ARTICULATION AGREEMENT FORM Effective: Fall 2021

### A. Sending and Receiving Institutions

Sending College: Fiorello H. LaGuardia Community College (LAGCC)

Department: Natural Sciences

Program: Biology

Degree: Associate in Science (A.S.)

Receiving College: College of Staten Island (CSI)

Department: Biology Program: Biology (BS)

Degree: Bachelor of Science (B.S.)

### B. Admission and retention Requirements for Senior College Program

- CSI will accept transfer credit only, not course grades. A maximum of 68-credits may be transferred from a two-year college or degree program. Students with an A.S. degree in Biology from LAGCC will receive a minimum of 60 credits.
- Students eligible for transfer to CSI under this agreement must have met at least the minimum requirements for admission to LAGCC, including a US high school diploma or its equivalent.

Total transfer credits granted toward the baccalaureate degree: 60

Total additional credits required at the senior college to complete baccalaureate degree: 60

Total credits required to complete the baccalaureate degree: 120

LaGuardia Community Colleg	e	CSI		
Course Number & Title	Credits	Course Number & Title	Credits	Credits Awarded
Required Core <sup>1</sup>				
ENG 101 English Composition I	3	ENG 111 Introduction to College	3	3
		Writing		
<b>ENG 102</b> Writing through Literature	3	ENG 151 College Writing	3	3
Select one course from the following:	3/4			3/4
MAT 115 College Algebra and	3	MTH 123 College Algebra and	4	
Trigonometry		Trigonometry		
MAT 117 Algebra and Trigonometry	3	MTH 199 Mathematics 100-level	3	
MAT 200 Precalculus	4	Elective	3	
		MTH 130 Pre-Calculus Mathematics		
SCB 201 General Biology I	4	BIO 170 General Biology I	3	4
		BIO 171 General Biology I Laboratory	1	
Subtotal	13/14		Subtotal	13/14
	ŀ	Flexible Core <sup>1</sup>		
World Cultures & Global Issues	3	World Cultures & Global Issues	3	3
course		course		
U.S. Experience In Its Diversity	3	U.S. Experience In Its Diversity	3	3
course		course		
Creative Expression course	3	Creative Expression course	3	3
Individual and Society course	3	Individual and Society course	3	3
Scientific World course		Scientific World course:		
SCC 201 General Chemistry I	4	CHM 141 General Chemistry I	3	4
		CHM 121 General Chemistry I	1	
		Laboratory		
Select one additional course from the		Flexible Core course		
categories above <sup>2</sup>		CHM 142 General Chemistry II	3	4
SCC 202 General Chemistry II	4	CHM 127 General Chemistry II	1	
		Laboratory		
Subtotal	20		Subtotal	20
Pathways Total	33/34	Pathw	ays Total	33/34

Program Core Requirements				
NSF 101 First Year Seminar for	2	ELEC 1000 Elective credit	2	2
Natural Sciences				
SCB 252 Fundamentals of	3	<b>BIO 299</b> Biology 200-level Elective	3	3
Biotechniques				
SCB 255 Cell Biology	4	BIO 237 Cell Biology	4	4
SCB 202 General Biology II	4	BIO 180 General Biology II	3	4

 <sup>&</sup>lt;sup>1</sup> This program has a waiver to list specific courses to complete Common Core requirements.
 <sup>2</sup> Student can select only two courses from any one discipline. MAT 200 is equivalent to CSI MTH 130, which is the pre-requisite for MATH 231 at CSI for students not immediately eligible for MATH 231 via the placement exams.

		BIO 181 General Biology II	1	
		Laboratory		
SCC 251 Organic Chemistry I	5	CHM 250 Organic Chemistry I	5	5
SCC 252 Organic Chemistry II	5	CHM 256 Organic Chemistry II	5	5
Free Electives	3/4	Free Electives	3/4	3/4
Curriculum Subtotal	27/26	Curriculum Subtotal 2'		27/26
Total for AS degree	60	Total for A	S degree	60

D. Summary of Transfer Credits from LAGCC and Credits to be completed at CSI

Biology, B.S.	Total Credits for the B.S	Transfer Credits	Credits to be
	degree	From LAGCC	Completed at CSI
General Education	30	30	0
Major Requirements	65-69	21	35-39
Electives	21-25	9	19-23
Total	120	60	60

### E. SENIOR COLLEGE UPPER DIVISION COURSES REMAINING FOR BACCALAUREATE DEGREE

E. SENIOR COLLEGE UPPER DIVISION COURSES REMAINING FOR BACCALAUREATE DEGREE  I. Required Major Courses	
MTH 231 Analytic Geometry and Calculus I	3
MTH 229 Calculus Compiuter Laboratory	1
BIO 272 Statistics for the Biological Sciences	4
BIO 205 General Physiology	4
BIO 233 Genetics	4
BIO 235 Evolution	4
BIO 239 Ecology	4
PHY 116 Physics I OR PHY120 General Physics I and PHY121 General Physics Laboratory I	4
PHY 156 Physics II OR PHY160 General Physics II and PHY161 General Physics Laboratory II	4
Subtotal	32
II. Track 1: General Biology  One advanced six-hour laboratory course chosen from the following:	
	3
BIO 424 Molecular Biology and Biotechnology Laboratory	
BIO 450 Experimental Methods in Animal Physiology	3
BIO 452 Experimental Methods in Behavioral Biology	3
BIO 454 Advanced Methods in Cell Biology	3
BIO 456 Experimental Methods in Ecology	3
BIO 458 Experimental Methods in Cell Biochemistry	3
BIO 460 Experimental Methods in Advanced Genetics	3
Five courses in biology (BIO), at least three courses must be at or above the 300-level chosen from the following:	17-20
BIO 217 Introduction to Tropical Ecology(RLA)	3
BIO 220 Healthcare Law and Ethics(RLA)	3
BIO 222 Field Biology(RLA)	4
BIO 240 The Biology of Disease(RLA)	4
BIO 310 Vertebrate Zoology(RLA)	4
BIO 313 Invertebrate Zoology and Paleontology(RLA)	4
BIO 314 General Microbiology(RLA)	4
BIO 318 Histology(RLA)	4
BIO 321 Conservation Biology(RLA)	4
BIO 324 Developmental Biology(RLA)	4
BIO 328 Botany(RLA)	4
BIO 329 Marine Biology and Oceanography(RNL)	4
BIO 325/MLS 325 Diagnostic Molecular Biology(RLA) OR BIO 327 Molecular Biology(RLA)	4
BIO 326 Introduction to Bioinformatics and Genomics(RLA)	4
BIO 332 Advanced Physiology(RLA)	4
BIO 335 Gene Regulatory Systems(RLA)	4
BIO 338 Behavioral Biology(RLA)	4
BIO 346 General Virology(RLA)	4
BIO 365 Principles of Neurobiology(RNL)	3
BIO 370 Biochemistry I(RLA) OR BIO 372 Cell Biochemistry(RLA)	4
BIO 376 Biochemistry II(RLA)	4
	4
BIO 415 Mathematical Biology(RLA)	

### E. SENIOR COLLEGE UPPER DIVISION COURSES REMAINING FOR BACCALAUREATE DEGREE

E. SENIOR COLLEGE UPPER DIVISION COURSES REMAINING FOR BACCALAUREATE DEGREE	
BIO 425 Computational Molecular Biology(RNL)	4
BIO 428 Plant Physiology(RLA)	3
BIO 434 Comparative Physiology(RLA)	4
BIO 442 Immunology(RLA)	4
BIO 443 Scanning Electron Microscopy and X-ray Microanalysis(RNL)	4
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Subtotal	
III. Track 2: Ecology, Evolution, and Behavioral Biology	
BIO 338 Behavioral Biology(RLA)	4
bio 336 Beliavioral Biology(KLA)	<del></del>
One advanced six-hour laboratory course chosen from the following:	
BIO 424 Molecular Biology and Biotechnology Laboratory	3
BIO 450 Experimental Methods in Animal Physiology	3
BIO 452 Experimental Methods in Behavioral Biology	3
BIO 454 Advanced Methods in Cell Biology	3
BIO 456 Experimental Methods in Ecology	3
BIO 458 Experimental Methods in Cell Biochemistry	3
	1
BIO 460 Experimental Methods in Advanced Genetics	3
DIO 100 Experimental Methods in Maxaneed Genetics	
Four courses in biology (BIO), at least two courses must be at or above the 300-level chosen from the following and at	15-16
least two courses must have a laboratory component.	13-10
BIO 217 Introduction to Tropical Ecology(RLA)	3
BIO 222 Field Biology(RLA)	4
DIO 222 I Icia Diology (NDA)	• 
BIO 310 Vertebrate Zoology(RLA)	4
BIO 321 Conservation Biology(RLA)	4
	_
BIO 324 Developmental Biology(RLA)	4
BIO 328 Botany(RLA)	4
BIO 329 Marine Biology and Oceanography(RNL)	4
BIO 326 Introduction to Bioinformatics and Genomics(RLA)	4
BIO 415 Mathematical Biology(RLA)	4
BIO 313 Invertebrate Zoology and Paleontology(RLA)	4
Subtotal	
Track 3: Molecular, Cellular, and Developmental Biology	
Track 3. Morcular, Centilar, and Developmental Diology	

## E. SENIOR COLLEGE UPPER DIVISION COURSES REMAINING FOR BACCALAUREATE DEGREE

BIO 325/MLS 325 Diagnostic Molecular Biology(RLA) OR BIO 327 Molecular Biology(RLA)	4
One advanced six-hour laboratory course chosen from the following:	
BIO 424 Molecular Biology and Biotechnology Laboratory	3
BIO 454 Advanced Methods in Cell Biology	3
BIO 458 Experimental Methods in Cell Biochemistry	3
BIO 460 Experimental Methods in Advanced Genetics	3
Four courses in biology (BIO), at least two courses must be at or above the 300-level chosen from the following	15-16
and at least two courses must have a laboratory component.	2
BIO 220 Healthcare Law and Ethics(RLA)	3
BIO 240 The Biology of Disease(RLA)	4
BIO 314 General Microbiology(RLA)	4
BIO 318 Histology(RLA)	4
BIO 324 Developmental Biology(RLA)	4
BIO 326 Introduction to Bioinformatics and Genomics(RLA)	4
BIO 332 Advanced Physiology(RLA)	4
BIO 335 Gene Regulatory Systems(RLA)	4
BIO 346 General Virology(RLA)	4
BIO 365 Principles of Neurobiology(RNL)	3
BIO 370 Biochemistry I(RLA) OR BIO 372 Cell Biochemistry(RLA)	4
BIO 376 Biochemistry II(RLA)	4
BIO 420 Comparative Endocrinology(RLA)	4
BIO 425 Computational Molecular Biology(RNL)	4
BIO 434 Comparative Physiology(RLA)	4
BIO 442 Immunology(RLA)	4
BIO 443 Scanning Electron Microscopy and X-ray Microanalysis(RNL)	4
Major Discipline Requirements Total	_
Free Electives	
Total Credits Required for B.S. in Biology	120

# F. ARTICULATION AGREEMENT FOLLOW-UP PROCEDURES

#### Procedures for reviewing, updating, modifying or terminating agreement:

When any of the programs undergo any changes relevant to this agreement, this articulation agreement will be reviewed and revised as necessary by one or two faculty members of each institution's department, selected by their respective Chairpersons to represent them.

At the end of academic year the various representatives of each institution as indicated above will review the performance of transfer students to determine if adjustment to, or termination of the articulation agreement, is needed.

This articulation agreement will be publicized on both the LaGuardia Community College and CSI websites. Transfer advisers at LAGCC will promote this agreement with eligible students. The faculty representative from CSI's B.S. in Biochemistry will arrange an annual information session with the LAGCC campus for interested students.

#### **Additional Information:**

Students transferring to CSI must complete at least 40 credits at CSI, with at least half of the credits in the major program taken at CSI.

If more than 64 credits are transferred students may not graduate with honors. A minimum of 56 credits must be completed at CSI to graduate with honors.

### **B.S.** with Honors in Biology

Eligibility. GPA 3.5 or above. Approval by the Biology Department.

Requirements for Graduation with Honors:

- 1. Successful completion of 8 credits of Biology 494, which will include independent research under the guidance of faculty members and the presentation and approval of a thesis by the Honors Committee of the Biology Discipline.
- 2. Certification by the Honors Committee of the Biology Discipline.

**Effective Date:** Review Date:

## LaGuardia Community College

Paulphrais

Michael Parrish 417121

College of Staten Island

Dr. Paul Arcario Date
Provost and Vice President for Academic
Affairs

11/30/20

Dr. J. Michael Parrish

Provost and Senior Vice President of

Academic Affairs

Date

Dr. Maria Entezari

Chairperson, Natural Sciences Department

Wichael Cavagnero3/31/2021Dr. Michael CavagneroDateDean, Science and Technology

Dr. Chang-Hui Shen
Chairperson, Biology Department