

**APPENDIX 1
ARTICULATION AND TRANSFER TABLE**

Cuyahoga Community College: Associate of Science

Kent State University: Bachelor of Science in Biology, Molecular and Cellular Biology Concentration

EQUIVALENCIES CURRENTLY ON THE TRAFNER TABLES			
Cuyahoga Community College	Credits	KENT STATE UNIVERSITY	Credits
OTM English Composition		Kent Core Composition (6 credits)	
ENG 1010 College Composition I	3	ENG 11011 College Writing I	3
ENG 1020 College Composition II	3	ENG 21011 College Writing II	3
OTM Mathematics, Statics and Logic		Kent Core Math/Critical Reasoning (3 credits)	
MATH 1530 College Algebra <u>or</u> MATH 1540 Trigonometry	3-4	MATH 11010 Algebra for Calculus <u>or</u> MATH 11022 Trigonometry	3-4
OTHM Arts and Humanities		Kent Core Humanities or Fine Arts (6 credits)	
Numerous course options available*	6		6
OTM Social and Behavioral Sciences		Kent Core Social Sciences (6 credits)	
	3		3
Numerous course options available*	3	One course in another area of study*	3
OTM Natural Sciences		Kent Core Basic Sciences (6 credits)	
BIO 1500 Principles of Biology I	4	BSCI 10120 Biological Foundations	4
BIO 1510 Principles of Biology II	4	BSCI 10110 Biological Diversity	4
OTM (additional)		Kent Core Additional (9 credits)	
COMM 1010 Fundamentals of Speech	3	COMM 15000 Introduction to Human Communication	3
CHEM 1300/130L General Chemistry I and Lab	5	CHEM 10060/10062 General Chemistry I and Lab	5
MATH 1610 Calculus I	5	MATH 12002 Analytic Geometry and Calculus I	5
		College General Requirements	
Beginning I Foreign Language	4	Elementary I Foreign Language	4
Beginning II Foreign Language	4	Elementary II Foreign Language	4
Program Requirements		Program Requirements	
CHEM 1010 Introduction to Inorganic Chemistry, if necessary	3-4		
MATH 1540 Trigonometry, if necessary	3	MATH 11022 Trigonometry	
MATH 1620 Calculus II***	5	MATH 12003 Analytic Geometry and Calculus II	5
CHEM 1310/131L General Chemistry II and Lab	5	CHEM 10061/10063 General Chemistry II and Lab	5
CHEM 2300 Organic Chemistry I**	5	CHEM 20481 Basic Organic Chemistry I**	4
CHEM 2310 Organic Chemistry II**	5	CHEM 20482 Basic Organic Chemistry II**	2
PHYS 1210 College Physics I	4	PHY 13001/13021 General College Physics I & Lab	5
PHYS 1220 College Physics II	4	PHY 13002/13022 General College Physics II & Lab	5
		PROGRAM REQUIREMENTS TO BE COMPLETED AT KENT STATE UNIVERSITY (no equivalent at Cuyahoga Community College)	
		BSCI 30140 Cell Biology	4
		BSCI 30156 Elements of Genetics	3
		BSCI 40158 Molecular Biology	3
		BSCI 40163 Evolution	3
		BSCI 40060 Writing in Biology	1

		CHEM 30475 Organic Chemistry Laboratory I, if necessary, part of Chemistry elective options	1
		MATH 30011 Basic Probability and Statistics, if MATH 12003 not taken	3
		Upper-division Concentration Electives	25-27
		General Electives, upper-division if needed	12

** Students should select one course that is designated global diversity and one that is designated domestic diversity*

***Students must take both courses at the same institution*

**** At Kent State University, students may take MATH 12003 or MATH 30011*

**APPENDIX 2
SUGGESTED SEMESTER SEQUENCE**

Cuyahoga Community College: Associate of Science

Kent State University: Bachelor of Science in Biology, Molecular and Cellular Biology Concentration

Course Subject and Title	Credit Hours	Upper Division	Notes on Transfer Coursework to Kent State
Semester One: [16-17 Credit Hours] Cuyahoga Community College			
ENG 1010/101H College Composition I	3		Required for AS and Transfer Module
BIO 1500 Principles of Biology I	4		Applied toward AS and Transfer Module; Required for BS
Social/Behavioral Elective	3		Required for AS and Transfer Module; Select from Transfer Module courses
MATH 1530 College Algebra or 1540 Trigonometry, if needed	3-4		Required for AS (60 total hours required); Applied toward BS (120 total hours required)
Arts/Humanities Elective	3		
Semester Two: [17 Credit Hours] Cuyahoga Community College			
ENG 1020 /102H College Composition II	3		Required for AS and Transfer Module
BIO 1510 Principles of Biology II	4		Applied toward AS and Transfer Module; Required for BS
Arts/Humanities Elective	3		
CHEM 1010 Intro to Inorganic Chemistry, if necessary, or General Elective	3-4		Required for AS (60 total hours required); Applied toward BS (120 total hours required)
General Elective (Recommended: MATH 1540, if necessary)	3		Required for AS (60 total hours required); Applied toward BS (120 total hours required)
Semester Three: [16-17 Credit Hours] Cuyahoga Community College			
COMM 1010 Fundamentals of Speech	3		Required for AS and Transfer Module
CHEM 1300/130L General Chemistry I and Lab	5		Applied toward AS and Transfer Module; Required for BS
MATH 1610 Calculus I	5		Applied toward AS and Transfer Module; Required for BS
Foreign Language	3-4		Applied toward AS (60 total hours required); Required for BS
Semester Four: [16-17 Credit Hours] Cuyahoga Community College			
CHEM 1310/131L General Chemistry II and Lab	5		Applied toward AS and Transfer Module; Required for BS
Foreign Language	3-4		Applied toward AS (60 total hours required); Required for BS
MATH 1620 Calculus II	5		Applied toward AS and Transfer Module; Required for BS
Social/Behavioral Elective	3		Required for AS and Transfer Module; Select from Transfer Module courses
62-64 Total Credit Hours to Graduate with the AS Degree from Cuyahoga Community College			

Course Subject and Title	Credit Hours	Upper Division	Notes on Transfer Coursework to Kent State
Semester Five: [13-17 Credit Hours] Kent State University			
CHEM 20481 or 30481 (Basic) Organic Chemistry I	3-4		Required in major
BSCI 30140 Cell Biology	4	X	Required in major
Concentration Electives	6	X	Required in major
Organic Chemistry Elective ^a	0-3		Required
Semester Six: [13-18 Credit Hours] Kent State University			
BSCI 30156 Elements of Genetics	3	X	Required in major
BSCI 40600 Writing in BSCI	1	X	Required
BSCI 40158 Molecular Biology ^b	3	X	Required
Organic Chemistry Elective ^a	0-3		Required
Concentration Electives	6-8	X	Required
Semester Seven: [18 Credit Hours] Kent State University			
BSCI 40163 Evolution	3	X	Required
Concentration Requirements	9	X	
General Electives, Upper Division if needed	6		
Semester Eight: [14 Credit Hours] Kent State University			
Concentration Requirements	9	X	
General Electives, Upper Division if needed	5		
121-125 Total Credit Hours to Graduate with the BS, including transfer coursework, from Kent State University			

a To meet concentration requirements, the organic chemistry elective must be taken in semester 5 (CHEM 30475 Organic Chemistry I Lab) or semester 6 (CHEM 20482 or 30482 Organic Chemistry II Lecture).

b BSCI 40158 offered spring only.

Requirements to graduate with the BS degree program: To graduate, students must have minimum 120 credit hours, 42 upper-division credits hours of coursework, a minimum 2.00 major GPA and minimum 2.00 cumulative GPA. They must also fulfill an approved experiential learning experience, a two-course diversity requirement (domestic and global), complete a writing intensive course with a minimum C (2.000) grade. Please be aware of Kent State's residence policy, which can be found in the [Kent State University Catalog](#). More specific graduation requirement information can be found in the Academic Policies section of the Kent State University Catalog (www.kent.edu/catalog).

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It is recommended that students intending to pursue the Bachelor of Science in Biology, Molecular and Cellular Biology Concentration through Kent State University consult with academic advisors at both Cuyahoga Community College and Kent State University.