

ARTICULATION AGREEMENT
IN BIOLOGY
BETWEEN
JAMESTOWN COMMUNITY COLLEGE
AND
ST. BONAVENTURE UNIVERSITY
2014

PURPOSE OF AGREEMENT

This document establishes a transfer articulation agreement between Jamestown Community College and St. Bonaventure University. Its purpose is to afford students the opportunity to pre-plan their college careers, and to facilitate the transfer process from the Associate in Science (A.S.) in Liberal Arts and Sciences: Math & Science and A.S. Biotechnology degree programs at Jamestown Community College to the Bachelor of Science (B.S.) in Biology degree program at St. Bonaventure University.

GENERAL GUARANTEE OF ADMISSION AND STANDING

Students who graduate from Jamestown Community College with the A.S. Liberal Arts and Sciences: Math & Science or A.S. Biotechnology degree are guaranteed acceptance into the B.S. Biology degree program at St. Bonaventure University provided they have a minimum Jamestown Community College cumulative grade point average of 2.5. Students who transfer 60 or more credit hours to St. Bonaventure University are guaranteed full junior standing.

GENERAL GUARANTEE OF OPPORTUNITY TO GRADUATE

Students who graduate from Jamestown Community College having earned a minimum grade of C for at least 39 credit hours from among the courses listed in Appendix A of this agreement are guaranteed the opportunity to earn the B.S. Biology degree with four semesters of normal coursework at St. Bonaventure University.

Students who are admitted to St. Bonaventure University without having earned an A.S. degree but having earned a minimum grade of C for at least 54 Jamestown Community College credit hours from among the courses listed in Appendix A plus Appendix B of this agreement are also guaranteed the opportunity to earn the B.S. Biology degree with four semesters of normal coursework at St. Bonaventure University.

Transferred coursework must include the following at Jamestown Community College in order to graduate from St. Bonaventure University in two years: 1) CHE 1550/1560, 2) either CHE 2530/2540 or PHY 1710/2710, and 3) BIO 2560 or an approved elective.

A student may transfer a course in which less than a C was earned only if the cumulative GPA at the time of enrollment is at least 2.5. For students whose cumulative GPA is below 2.5 at the time of enrollment, St. Bonaventure University requires a minimum grade of C for a course to transfer. When a Jamestown Community College course carries more credit hours than its equivalent St. Bonaventure University course, the excess will transfer as elective credit hours within the same discipline. To earn a

baccalaureate degree, students must complete at least 45 undergraduate hours and at least half of the major requirements at St. Bonaventure University.

A separate agreement allows students who are enrolled full-time at Jamestown Community College to take one course free of charge at St. Bonaventure University each semester on a space-available basis.

**APPENDIX A – FOR STUDENTS WHO EARN AN A.A. OR A.S. DEGREE¹ –
ST. BONAVENTURE UNIVERSITY/JAMESTOWN COMMUNITY
COLLEGE COURSE EQUIVALENCIES**

<u>SBU COURSE</u>	<u>CREDIT HOURS</u>	<u>JCC EQUIVALENT COURSE</u>	<u>CREDIT HOURS</u>
Biology Degree Requirements			
<u>Major Requirements</u>			
BIO 105 Biological Science I	4	BIO 1570 Principles of Biology I or BIO xxxx Biology: A Molecular Approach	4
BIO 106 Biological Science II	4	BIO 1580 Principles of Biology II	4
BIO 291 Genetics	3	BIO 2560 Genetics	4 ²
BIO 292 Cell Biology	3	BIO 2800 Cell and Molecular Biology	4 ²
BIO 293 Genetics and Cell Biology Laboratory	1	Excess 1 credit from BIO 2560 or BIO 2800 will be applied here as equivalent to BIO 293	1
BIO 399 Biology Seminar			
BIO 456-457 Senior-Faculty Colloquium in Biology			
<u>Biology Electives - Any 18 credits from the following:</u>	18	<u>Biology Electives – Up to the equivalent of 18 SBU credits from the following:</u>	up to 21
BIO 210 Plant Biology (3 credits)		BIO 2670 Botany (4 credits) ²	
BIO 294 Genomics			
BIO 308 Applied Kinesiology and Exercise Physiology			
BIO 318 Research Participation I (2) OR BIO 318/319 Research Participation I/II (4)		BIO 2810 Biotechnology Research ³ (2) OR BIO 7502 Summer Undergraduate Research I ³ (4) OR BIO 8506 Summer Undergraduate Research II ³ (4)	
BIO 321 General Microbiology (3)		BIO 2531/2532 Microbiology/Lab (4) ² OR BIO 2530 Microbiology (4) ²	
BIO331 Physiology & Anatomy of the Human I			
BIO 332 Physiology & Anatomy of the Human II			
BIO 341 Ecology			

BIO 350 Neurobiology			
BIO 362 Animal Development			
BIO 371 Biochemistry			
BIO 380 Fieldwork in Tropical Ecosystems		BIO 2620: Tropical Biology Seminar	
BIO 390 Evolution			
BIO 403 Freshwater Ecosystems			
BIO 406 Plant Development and Physiology			
BIO 466 Molecular Cell Biology			
BIO 472 Immunology			
BIO ELEC approved transfer elective ⁴		BIO 2550 Conservation Biology ⁴ (3)	
BIO ELEC approved transfer elective ⁴		BIO 2660 Zoology ⁴ (4)	
BIO ELEC approved transfer elective ⁴		BIO 8507 Cancer Biology ⁴ (1)	
BIO ELEC approved transfer elective ⁴		BIO 8508 Virology ⁴ (1)	
<u>Other Science and Math Requirements</u>			
CHEM 101/101L General Chemistry I/Laboratory	4	CHE 1550 College Chemistry I	4
CHEM 102/102L General Chemistry II/Laboratory	4	CHE 1560 College Chemistry II	4
CHEM 301/301L Organic Chemistry I/Laboratory	4	CHE 2530 Organic Chemistry I	4
CHEM 302/302L Organic Chemistry II/Laboratory	4	CHE 2540 Organic Chemistry II	4
MATH 151 Calculus I	4	MAT 1710 Calculus and Analytic Geometry I	4
MATH 107 Introduction to Statistics	3	MAT 1540 Elementary Statistics	3
OR MATH 151 Calculus II (4)		OR MAT 1720 Calculus & Analytic Geometry II (4)	
PHYS 103/103L General Physics I/ Laboratory	4	PHY 1710 Analytical Physics I	4
PHYS 104/104L General Physics II/ Laboratory	4	PHY 2710 Analytical Physics II	4
<u>Foreign Language Requirement</u>			
One foreign language course at the 202 level or above ⁵	3	One foreign language course at the 2520 level ⁵	3-4
<u>Clare College Requirements¹</u>			
CLAR 101 The Intellectual Journey			
CLAR 302 Inquiry in the Natural World	4	Any 4-credit laboratory course in BIO, CHE, GLG, or PHY ⁶	4
CLAR 304 The Good Life			
CLAR 207 The Catholic- Franciscan Heritage			

CLAR 401 The University Forum

CLAR 110/111 Composition and Critical Thinking	6	ENG 1510/1530 English Composition I/II	6
<u>Electives</u>	15-16	Electives - Any college level (non-imputed) Courses	up to 16

¹Any student who earns an Associate in Arts or Associate in Science degree within one year of matriculation at SBU will have the following requirements waived: CLAR 103, 105, 110, 206, 208, and 209.

²Excess of 1 credit for each of these courses transfers as BIO ELEC approved transfer elective. Upon transfer to SBU, students should follow up with the registrar to be sure that their credits have transferred accordingly.

³Transfer of these courses as Biology Electives is contingent upon submission by the student of a written description of the research, and confirmation by the SBU Biology Department that the research was of sufficient breadth and depth to warrant transfer at the 300 level.

⁴The SBU BIO ELEC transfer equivalency credits for JCC BIO 2550, BIO 2660, BIO 2800, BIO 8507, and BIO 8508 will count as Biology Electives at SBU. Upon transfer to SBU, students should follow up with the registrar to be sure that their credits have transferred accordingly.

⁵The SBU School of Arts and Sciences requires all majors to complete a foreign language course at the 202 level or higher. Students not prepared to begin at this level will need to take additional courses in the language which count as general electives.

⁶The CLAR 302 equivalent course (additional laboratory course) must be a lecture + lab course in BIO, CHE, GLG, or PHY that is not used as credit toward requirements for the SBU major in Biology. JCC students can choose BIO 1570/2660/2670 to fulfill the SBU requirements of BIO 105/106 plus the additional laboratory course. BIO 2670 Botany can be used in transfer in partial fulfillment of this sequence, OR it can be used as equivalent to BIO 210 Plant Biology; it cannot be used both ways.

APPENDIX B – CLARE COLLEGE (CORE CURRICULUM AT ST. BONAVENTURE) EQUIVALENCIES FOR STUDENTS WHO DO NOT EARN AN A.A. OR A.S. DEGREE

CLAR 110/111 Composition and Critical Thinking	6	ENG 1510/1530 English Composition I/II ¹	6
CLAR 103 Foundations of the Western World	3	Any 3-credit world or American history course	3
CLAR 105 Inquiry in the Social World	3	Any 3-credit course in ECO, POL, PSY, or SOC	3
CLAR 206 Foundational Religious Texts of the Western World	3	Any one of the following: Any 3-credit REL course ANT 1530 Comparative Religion ANT/HIS/REL 2570 History of World Religions ENG 2850 Literature of the Bible PHL 2550 Philosophy of Religion	3
CLAR 208 World Views	3	Any one of the following: ANT 1520 Introduction to Cultural Anthropology ANT 2510 Peoples and Cultures of the Americas	3

		ANT 2520 People/Cultures of World	
		ANT 2540 Social Anthropology	
		POL 1520 World Politics	
		POL 2860 European Union	
CLAR 209 Arts and Literature	3	SOC 2580 Minorities in American Society	
		Any one of the following:	3
		Any 3-credit course in ART, MUS, THE	
		ENG 2510 Masterpieces/World Literature I	
		ENG 2520 Masterpieces/World Literature II	
		ENG 2550 American Literature I	
		ENG 2560 American Literature II	
		ENG 2610 British Literature I	
		ENG 2620 British Literature II	
		ENG 2650 Award Winning Young Adult Literature	
		ENG 2830 Shakespeare	
		INT 2530 Humanities I	
		INT 2540 Humanities II	
CLAR 302 Inquiry in the Natural World	4	Any 4-credit laboratory course in BIO, CHE, GLG, or PHY	4

¹ The CLAR 110 requirement at St. Bonaventure University is waived for JCC students who place out of ENG 1510 and transfer ENG 1530 to SBU.