Transfer Articulation Agreement

between

William Paterson University College of Science and Health

and

Bergen Community College

for

Associate of Science Degrees in Natural Sciences or Mathematics

and

Bachelor of Science and Bachelor of Arts Degrees in Science and Health

The intent of this articulation agreement is to define the procedures for a transfer articulation between William Paterson University College of Science and Health and Bergen Community College. Both entities agree to mutual cooperation in establishing and maintaining articulation for their respective programs for Associate of Science degrees in Natural Sciences or Mathematics transferable to Bachelor of Science and Bachelor of Arts degrees at William Paterson University College of Science and Health. The principal beneficiaries of this agreement are students seeking majors in Science or Mathematics whose progress toward their degrees is best assured when they are provided with current information about courses and programs. Firm arrangements between departments and institutions provide the opportunity for these students to plan a total baccalaureate degree through program to program agreement at the outset of their college education.

William Paterson University agrees to accept all the general education credits included in this agreement. Per its transfer credit policy, William Paterson University agrees to accept up to half of the credits required for the major. Course equivalencies for prerequisites and major courses will also be accepted (see Appendix A for specific course requirements) and will serve as the basis for equivalencies.

This agreement will become effective immediately upon the signatures of both parties. Immediately thereafter, William Paterson University will provide information packets for transfer admission, special transfer days, and other recruitment services. In turn, Bergen Community College will make available to its students all information, including the list of course equivalencies pertaining to this agreement. The agreement and equivalencies will be reviewed on a regular basis.

PRINCIPLES OF THE AGREEMENT

COMPLETION OF PROGRAMS

Bergen Community College transfer students will be required to meet all graduation requirements as listed for William Paterson University students.

SPECIFIC REQUIREMENTS

The determination of major program requirements for a baccalaureate degree in the College of Science and Health shall be the responsibility of William Paterson University.

ELIGIBILITY

A. Grade point average (GPA) requirement

For admission to William Paterson University College of Science and Health, the student will be required to earn at least a 2.0 overall average on a four-point scale.

B. Course equivalencies and/or area requirements. (See Appendix A)

Students with an Associate of Science Degree in Natural Sciences or Mathematics

Students who earn an Associate of Science degree in Natural Sciences or Mathematics at Bergen Community College are guaranteed junior status admission to William Paterson University conditional upon meeting the prerequisites of the minimum requirements for admission to the College of Science and Health. Associate of Science degree students will be provided with individual evaluations of coursework based on course equivalencies articulated between Bergen Community College and William Paterson University College of Science and Health.

FINANCIAL AID

College students transferring into William Paterson University will be treated the same as native William Paterson University students of equal class standing when applying for financial aid and in the award and distribution of funds.

AGREEMENT REVIEW AND UPDATE

Bergen Community College and William Paterson University will assign a staff member to serve as a liaison to assure maintenance of communication between the two institutions. As necessary, Bergen Community College and William Paterson University faculty shall meet to discuss academic programs, especially with regard to any changes being contemplated. William Paterson University and Bergen Community College representatives will consult whenever changes in policy or curricula are articulated which will affect students transferring under the terms of this agreement. Representatives from both institutions shall also facilitate support, consultation, and collaboration between their faculties in matters related to this agreement, general education, degree requirements, education certification, and other academic matters.

Appendix A

Associate of Science degrees in Natural Sciences or Mathematics at Bergen Community College

to

Bachelor of Science and Bachelor of Arts degrees at William Paterson University College of Science and Health

This Transfer Articulation Agreement is meant to cover students graduating with a Bergen Community College Associate of Science (A.S.) degree in Natural Sciences or Mathematics with the following options:

General Biology Biotechnology Chemistry Computer Science Mathematics Physics

entering the following Bachelor of Science (B.S.) and Bachelor of Arts (B.A.) programs at William Paterson University College of Science and Health:

Biology-General - B.S.
Biology-Ecology - B.S.
Biology-Physiology and Behavior - B.S.
Biotechnology - B.S.
Chemistry - B.S.
Computer Science - B.S.
Mathematics - B.A.
Mathematics - B.S.
Environmental Science - B.S.
Integrated Math & Science - Env. Science - B.A.
Integrated Math & Science - Biology - B.A.
Integrated Math & Science - Chemistry - B.A.
Integrated Math & Science - Mathematics - B.A.

Program	Credits	Courses at Bergen Community College (22-24 program required credits in Math, Natural Sciences, and Technology electives)	Equivalence at William Paterson University
	4	BIO 101 General Biology I Lec. & Lab (elective)	BIO 1630 General Biology I (required)
Natural Sciences or Mathematics-General Option-A.S.	4	CHM 140 General Chemistry I Lec. & CHM 141 General Chemistry I Lab (elective)	CHEM 1600 General Chemistry I (required)
to Biology-General-B.S.; Biology-Ecology-B.S.;	4	CHM 240 General Chemistry II Lec. & CHM 241 General Chemistry II Lab (elective)	CHEM 1620 General Chemistry II (required)
Biology-Physiology and Behavior-B.S.; AND Biotechnology B.S.	4	PHY 186 General Physics I [algebra-based] (elective) Or PHY 280 Physics I [calculus-based] (elective)	PHYS 2550 College Physics I [algebra-based] (prerequisite) Or PHYS 2600 General Physics I [calculus-based] (prerequisite)
	4	MAT 280 Calculus I (required)	MATH 1600 Calculus I (prerequisite)

Program	Credits	Courses at Bergen Community College (23-24 program required credits & 12 Math/Nat Sci/Tech elective credits)	Equivalence at William Paterson University
	4	BIO 101 General Biology I Lec. & Lab (required)	BIO 1630 General Biology l (required)
Natural Sciences or	4	BIO 203 General Biology II Lec. & Lab (required)	BIO 1640 General Biology II (not required for Biotechnology)
Mathematics-Biology Option-A.S. to Biology-General-B.S.; Biology-Ecology-B.S.; Biology-Physiology and Behavior-B.S.; AND Biotechnology B.S.	4	CHM 140 General Chemistry I Lec. & CHM 141 General Chemistry I Lab (required)	CHEM 1600 General Chemistry I (required)
	4	CHM 240 General Chemistry II Lec. & CHM 241 General Chemistry II Lab (required)	CHEM 1620 General Chemistry II (required)
	4	PHY 186 General Physics I [algebra-based] (math/nat sci/tech elective) Or PHY 280 Physics I [calculus-based] (math/nat sci/tech elective)	PHYS 2550 College Physics I [algebra-based] (prerequisite) Or PHYS 2600 General Physics I [calculus-based] (prerequisite)
	4	MAT 280 Calculus I (required choice)	MATH 1600 Calculus I (prerequisite)

Program	Credits	Courses at Bergen Community College (23 program required credits & 12 Math/Nat Sci/Tech required credits)	Equivalence at William Paterson University
Natural Sciences or Mathematics- Biotechnology Option- A.S. to Biology-General-B.S.; Biology-Ecology-B.S.; Biology-Physiology and Behavior-B.S.; AND Biotechnology B.S.	4	BIO 101 General Biology I Lec. & Lab (required)	BIO 1630 General Biology I (required)
	4	BIO 203 General Biology II Lec. & Lab (required)	BIO 1640 General Biology II (not required for Biotechnology)
	4	CHM 140 General Chemistry I Lec. & CHM 141 General Chemistry I Lab (required)	CHEM 1600 General Chemistry I (required)
	4	CHM 240 General Chemistry II Lec. & CHM 241 General Chemistry II Lab (required)	CHEM 1620 General Chemistry II (required)
	4	MAT 280 Calculus I (required)	MATH 1600 Calculus I (prerequisite)

Program	Credits	Courses at Bergen Community College (24 program required credits & 12 Math/Nat Sci/Tech required credits)	Equivalence at William Paterson University
Natural Sciences or Mathematics - Chemistry Option- A.S. to Chemistry-B.A. or Chemistry-B.S.	4	CHM 140 General Chemistry I Lec. & CHM 141 General Chemistry I Lab (required)	CHEM 1600 General Chemistry I (required)
	4	CHM 240 General Chemistry II Lec. & CHM 241 General Chemistry II Lab (required)	CHEM 1620 General Chemistry II (required)
	4	CHM 260 Organic Chemistry I (required)	CHEM 2570 Organic Chemistry I (required)
	4	CHM 262 Organic Chemistry II (required)	CHEM 2580 Organic Chemistry II (required)
	4	MAT 280 Calculus I (required)	MATH 1600 Calculus I (prerequisite)
	4	MAT 281 Calculus II (required)	MATH 1610 Calculus II (required)
	4	PHY 280 Physics I [calculus-based] (required)	PHYS 2600 General Physics I [calculus-based] (prerequisite)
	4	PHY 290 Physics II [calculus-based] (required)	PHYS 2610 General Physics II [calculusbased] (required)

Program	Credits	Courses at Bergen Community College (22-24 program required credits & 12 Math/Nat Sci required credits)	Equivalence at William Paterson University
	4	MAT 280 Calculus I (required)	MATH 1600 Calculus I (prerequisite)
	4	MAT 281 Calculus II (required)	MATH 1610 Calculus II (required)
Natural Sciences	4	MAT 282 Calculus III (required)	MATH 2010 Calculus III (required)
or Mathematics –		MAT 283 Differential Equations	MATH 3220 Differential Equations
Mathematics	4	(required)	(required)
Option-A.S. to Mathematics-B.A. or Mathematics-B.S.			MATH 2020 Linear Algebra
	4	MAT 286 Linear Algebra (required)	(required)
		PHY 280 Physics I Lec. & Lab [calculus-	PHYS 2600 General Physics I
	4	based] (required natural science elective)	[calculus-based] (prerequisite)
		PHY 290 Physics II Lec. & Lab [calculus-	PHYS 2610 General Physics II
	4	based] (required natural science elective)	[calculus-based] (required)

Program	Credits	Courses at Bergen Community College (24 program required credits & 12 Math/Nat Sci required credits)	Equivalence at William Paterson University
	4	MAT 280 Calculus I (required)	MATH 1600 Calculus I (prerequisite)
Natural Sciences	4	MAT 281 Calculus II (required)	MATH 1610 Calculus II (required)
or Mathematics –	4	MAT 282 Calculus III (required)	MATH 2010 Calculus III (required for Math BA & BS)
Physics Option-A.S. to Chemistry-B.A.	4	PHY 280 Physics I Lec. & Lab [calculus-based] (required)	PHYS 2600 General Physics I [calculus-based] (prerequisite)
Chemistry-B.A. Chemistry-B.S. Mathematics-B.A. Mathematics-B.S.	4	PHY 290 Physics II Lec. & Lab [calculus-based] (required)	PHYS 2610 General Physics II [calculus-based] (required)
	4	PHY 291 Physics III Lec. & Lab [calculus-based] (required)	PHYS 2620 General Physics III [calculus-based] (one choice from required physics minor electives)

Program	Credits	Courses at Bergen Community College (22-24 program required credits & 12 Nat Sci required elective credits)	Equivalence at William Paterson University
		CIS 165 Fundamentals of Programming	
	3	(required)	Elective Credit
		CIS 265 Advanced Programming Concepts	CS 2300 Computer Science I
	4	(required)	(required)
		CIS 271 Computer Org. & Assembly Lang.	
		(required)	CS 2800 Computer and Assembler
Natural Sciences	3		Language (required)
or Mathematics -		CIS 277 Data Structures & Algorithms	
Computer Science	4	(required)	CS 3420 Data Structures (required)
Option-A.S.		CIS 288 Discrete Math for Comp. Sci.	CS 2600 Discrete Structures
to	4	(required)	(required)
Computer Science-	4	MAT 280 Calculus I (required)	MATH 1600 Calculus I (perquisite)
B.S.	4	MAT 281 Calculus II (required)	MATH 1610 Calculus II (required)
		CHM 140 General Chemistry I Lec. &	CHEM 1600 General Chemistry I
		CHM 141 General Chemistry I Lab	(prerequisite)
	4	(required natural science elective choice)	(prerequisite)
		CHM 240 General Chemistry II Lec. &	CHEM 1620 General Chemistry II
		CHM 241 General Chemistry II Lab	(one required second semester choice)
	4	(required natural science elective choice)	(one required second semester enotee)

Program	Credits	Courses at Bergen Community College (22-24 program required credits in Math, Natural Sciences, and Technology electives)	Equivalence at William Paterson University
	4	BIO 101 General Biology 1 (elective)	BIO 1630 General Biology I (prereq)
	4	BIO 108 Intro to Env. Science Lec. & Lab (elective)	ENV 1100 Env. Sustainability (required)
Natural Sciences	4	CHM 140 General Chemistry I Lec. & CHM 141 General Chemistry I Lab (elective)	CHEM 1600 General Chemistry I (required)
or Mathematics – General Option-A.S. to	4	CHM 240 General Chemistry II Lec. & CHM 241 General Chemistry II Lab (elective)	CHEM 1620 General Chemistry II (required)
Environmental			ENV 1150 General Geology
Science-B.S.	4	PHY 113 Geology Lec. & Lab (elective)	(required)
	4	MAT 280 Calculus I (required)	MATH 1600 Calculus I (prereq)
		PHY 280 Physics I Lec. & Lab [calculus-	PHYS 2600 General Physics I
	4	based] (elective)	[calculus-based] (prereq)
		PHY 290 Physics II Lec. & Lab [calculus-	PHYS 2610 General Physics II
	4	based] (elective)	[calculus-based] (required)

Program	Credits	Courses at Bergen Community College	Equivalence at William Paterson University
[Check with BCC STEM Counselor for specific BCC	4	CHM 140 General Chemistry I Lec. & CHM 141 General Chemistry I Lab	CHEM 1600 General Chemistry I (required)
degree]	4	CHM 240 General Chemistry II Lec. & CHM 241 General Chemistry II Lab	CHEM 1620 General Chemistry II (required)
transferable to	3	CIS 158 Intro to Computer Science	CS 2010 Computer & Info Tech (required)
Integrated Math & Science -	4	PHY 113 Geology	ENV 1150 General Geology (required)
Environmental Science B.A.	4	PHY 185 Intro to Physics	PHY 1100 Intro to Physics (required)

Program	Credits	Courses at Bergen Community College	Equivalence at William Paterson University
[Check with BCC	4	BIO 101 General Biology I	BIO 1630 General Biology I (required)
STEM Counselor for specific BCC	4	BIO 203 General Biology II	BIO 1640 General Biology II (required)
degree]	4	CHM 140 General Chemistry I Lec. & CHM 141 General Chemistry I Lab	CHEM 1600 General Chemistry I (required)
transferable to Integrated Math &	4	CHM 240 General Chemistry II Lec. & CHM 241 General Chemistry II Lab	CHEM 1620 General Chemistry II (required)
Science - Biology B.A.	3	CIS 158 Intro to Computer Science	CS 2010 Computer & Info Tech (required)
	4	PHY 185 Intro to Physics	PHY 1100 Intro to Physics (required)

Program	Credits	Courses at Bergen Community College	Equivalence at William Paterson University
[Check with BCC	4	CHM 140 General Chemistry I Lec. & CHM 141 General Chemistry I Lab	CHEM 1600 General Chemistry l (prerequisite)
STEM Counselor for specific BCC	4	CHM 240 General Chemistry II Lec. & CHM 241 General Chemistry II Lab	CHEM 1620 General Chemistry II (required)
degree] transferable to	4	CHM 260 Organic Chemistry I	CHEM 2570 Organic Chemistry I (required)
Integrated Math &	4	CHM 262 Organic Chemistry II	CHEM 2580 Organic Chemistry Il (required)
Science - Chemistry B.A.	3	CIS 158 Intro to Computer Science	CS 2010 Computer & Info Tech (required)
	4	PHY 185 Intro to Physics	PHY 1100 Intro to Physics (required)

Program	Credits	Courses at Bergen Community College	Equivalence at William Paterson University
[Check with BCC	4	CHM 140 General Chemistry I Lec. & CHM 141 General Chemistry I Lab	CHEM 1600 General Chemistry I (required)
STEM Counselor for specific BCC	4	CHM 240 General Chemistry II Lec. & CHM 241 General Chemistry II Lab	CHEM 1620 General Chemistry II (required)
degree] transferable to	3	CIS 158 Intro to Computer Science	CS 2010 Computer & Info Tech. (required)
ir unsjerdore to	4	MAT 280 Calculus I	MATH 1600 Calculus I (required)
Integrated Math &	4	MAT 281 Calculus II	MATH 1610 Calculus II (required)
Science -			MATH 2020 Linear Algebra
Mathematics B.A.	4	MAT 286 Linear Algebra	(required)
	4	PHY 185 Intro to Physics	PHY I100 Intro to Physics (required)

<u>Note:</u>

- 1. William Paterson University recommends students to take two semesters of one foreign language at the community college. Two semesters of American Sign Language can also fulfill the foreign language requirement.
- 2. For students who enroll at William Paterson University Fall 2015 and beyond, the maximum number of transfer credits accepted from a community college will be 60 credits.

Transfer Articulation Agreement

between

William Paterson University College of Science and Health

and

Bergen Community College

Date: August 10, 2015

For Bergen Community College

For William Paterson University

President

President

Vice President for Academic Affairs

Provost and Senior Vice President for

Dean, College of Science and Health

Academic Affairs

Dean of Mathematics, Science & Technology