

Associate of Science Degree in Math/Science, Biology Option at Brookdale Community College

And

Bachelor of Science Degree in Biology, General at William Paterson University

<u>AS Mathematics/Science- Biology Option</u>			
<u>Brookdale Courses</u>	<u>Credits</u>	<u>WPU Equivalency</u>	<u>Credits</u>
<u>Semester 1</u>			
BIOL 101 General Biology	4	BIO 1630 General Biology, CMG	4
ENGL 121 The writing process	3	ENG 1100 College Writing	3
CHEM 101 General Chemistry I	5	CHEM 1600 General Chemistry I	4
Social Sciences Credits	3		
<u>Semester 2</u>			
BIOL 102 General Biology II	4	BIO 1620 General Biology, EEB	4
CHEM 102 General Chemistry II	5	CHEM 1620 General Chemistry II	4
ENGL 122 Writing and Research	3	Elective Credit	3
Humanities Credits	3		
<u>Semester 3</u>			
BIO 213 Microbiology	4	BIO 1700 Basic Microbiology or BIO 3200 Microbiology with a grade of B or higher in BIOL 213	4
CHEM 203 Organic Chemistry I	5	CHEM 2570 Organic Chemistry I	4
MATH 131 Statistics	4	MATH 1300 Elementary Statistics (Department will sub for MATH 2300 Statistics I)	4
Humanities or Social Sciences Credits	3		
<u>Semester 4</u>			
BIOL 208 Ecology and Field Biology	4	Elective Credit	4
PHYS 121 General Physics I	4	PHYS 2600 General Physics I	4
CHEM 204 Organic Chemistry II	5	CHEM 2580 Organic Chemistry II	4
Tech/Gen Ed. Credits	3		
<u>BS- Biology, General (60 credits required for the major)</u>			
		<u>Biology Major Requirements</u>	
		BIO 2050 Cell Biology	4
		BIO 2060 General Genetics	4
		BIO 2040 General Biology: Physiology	4
		<u>Biology Plant Elective (Choose 1)</u>	
		BIO 3610 General Botany	4
		BIO 3650 Plant Physiology	4
		BIO 3350 Field Botany	3
		BIO 4630 Terrestrial Plant Ecology	4

		<u>Biology Major Supporting Courses (Choose 1 course)</u>	
		MATH 1600 Calculus I	4
		<u>Biology Major Electives (Choose 3 courses)</u>	
		BIO 3020 Human Heredity	3
		BIO 3080 Animal Physiology	4
		BIO 3180 Zoology	4
		BIO 3330 Field Entomology	4
		BIO 3350 Field Botany	3
		BIO 3400 Ecology	4
		BIO 3450 Conservation Biology	3
		BIO 3500 Animal Behavior	3
		BIO 3520 Economic Botany	3
		BIO 3610 General Botany	4
		BIO 3650 Plant Physiology	4
		BIO 3720 Mathematical Models in the Biological Sciences	4
		BIO 4020 Aquatic Ecology	4
		BIO 4110 Physiology of Human Reproduction and Fertility	3
		BIO 4150 Evolutionary Physiology	4
		BIO 4160 Comparative Animal Physiology	4
		BIO 4170 Histology	4
		BIO 4210 Developmental Biology	4
		BIO 4220 Human Physiology	3
		BIO 4340 Genomics and Bioinformatics	4
		BIO 4330 Evolutionary Medicine	3
		BIO 4440 Evolution	3
		BIO 4500 Molecular Biology of Prokaryotes	4
		BIO 4600 Pharmacology	3
		BIO 4630 Terrestrial Plant Ecology	4
		BIO 4700 Bioethics	3
		BIO 4740 Neuroscience	4
		BIO 4840 Scanning Electron Microscopy	4
		BIO 4850 Transmission Electron Microscopy	4
Notes:			
1. William Paterson University will accept all associate degree credits under this program-to-program articulation agreement, including up to have of the William Paterson University major required credits, from New Jersey community college students who enroll at William Paterson University			
2. 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.			