BIOLOGY, B.S. -EDUCATION WITH TEACHER CERTIFICATION, ADOLESCENCE 7-12, 5-12

Code	Title	Credits
General Education Requirement (http://catalog.niagara.edu/ undergraduate/curriculum/foundation-courses/)		
Professional Requirement		
Select 27 credits	of Professional Requirement courses	27
Major Requirement		
BIO 121 & BIO 123L	General Biology I and Gen Biology Lab I	4
BIO 122	General Biology II	4
& BIO 124L	and Gen Biology Lab II	
BIO 210	Botany	4
BIO 212 & BIO 213L	Microbiology and Microbiology Lab	4
BIO 231 & BIO 233L	Anatomy & Physiology I and Anatomy & Physiology Lab I	4
BIO 232 & BIO 234L	Anatomy & Physiology II and Anatomy & Physiology Lab II	4
BIO 246	Genetics I	3
BIO 312	Conservation Ecology ²	3
CHE 111 & CHE 113L	General Chemistry I and General Chemistry Laboratory I	4
CHE 112 & CHE 114L	General Chemistry II and General Chemistry Laboratory II	4
MAT 111	Calculus I ²	4
or MAT 109	Precalculus	
PHY 121 & PHY 123L	General Physics and General Physics ²	4
Earth Science Elective		
Select one of the following:		3-4
BIO 432	Development & Lab	
BIO 334	Cell Biology	
CHE 345 & CHE 347L	Biochemistry I and Biochemistry Laboratory I	
CHE 346 & CHE 348L	Biochemistry II and Biochemistry Laboratory II	
New York State Certification Requirement		

New York State Certification Requirement

A college-level (three credit-hour) foreign language other than English is required for New York state certification.

Total Credits 76-77

BIO 312 Conservation Ecology and the earth science elective must be taken as free electives in the distribution component along with PHY 101 Survey of Physics or PHY 121 General Physics for the natural science elective, and MAT 109 Precalculus or MAT 111 Calculus I for the mathematics elective.