

Dept. of Education and Allied Studies
 John Carroll University – Teacher Education Program
 Adolescent Young Adult Content Advisement form
 Revised: 9.20.2011

Curriculum Content: Life Science
70-71 Semester Hours Required
34-35 credits in Biology
Praxis test – Biology: Content Knowledge (20235)

Course #	Course Title	Hours	Grade	Semester/Year
Introductory Biology Courses [12 credits]:				
Molecules & Cells [4 credits]:				
BL 155	Principles of Biology I	3		
BL 157	Principles of Biology Lab I	1		
Anatomy & Physiology: Plants and Animals [4 credits]:				
BL 156	Principles of Biology II	3		
BL 158	Principles of Biology Lab II	1		
Evolution & Biodiversity [4 credits]:				
BL 159	Principles of Biology III	3		
BL 160	Principles of Biology Lab III	1		
Additional Biology Courses [22 or 23 credits]:				
Molecules to Cell [8 credits]:				
BL 213	Genetics	4		Every Semester
BL 301	Introduction to Cell Biology	3		
BL 310/310L	Microbiology	4		Every Semester
BL 465	Molecular Genetics	3		
Cell to Organism - select only one [4 or 5 credits]:				
BL 350/350L	Vertebrate Anatomy & Lab	5		Spring
BL 360/360L	Human Physiology & Lab	4		Every Semester
BL 410	Infection and Immunity	3		
BL 420	Plant Physiology	3		Spring
BL 471	Immunology	3		Fall
BL 475	Endocrinology	3		Fall
Organism to Biosphere [10 credits]:				
BL 222	General Ecology	3		Every Semester
BL 224/224L	Terrestrial ecology	4		Fall
BL 331	Global Climate Change	3		Spring
BL 370	Evolution	3		Spring
BL 415	Introduction to Systematic Biology	3		Spring
BL 435/435L	Plant Ecology	4		Fall
BL 444/444L	Advanced Ecology	4		Fall

Required Support Courses [36 credits]:				
CH 141/143	General Chemistry I & Lab	5		
CH 142/144	General Chemistry II & Lab	5		
CH 221/223	Organic Chemistry I & Lab	4		
CH 222/224	Organic Chemistry II & Lab	4		
MT 135	Calculus I & Analytic Geometry I	4		
MT 228	Statistics for the Biological Sciences	3		
PH 125/125L	Physics I & Lab	4		Fall

Select One:

PH 101/101 L	Earth Science I & Lab	4		
PH 102/102 L	Earth Science II & Lab	4		

Select One:

PL 314	Science, Technology & Ethics	3		
PL 375	Philosophy of Science	3		