

Name: _____

ID#: _____

Email: _____

Biology Credits: 35 Math Credits: 39 Total Credits: 132

All biology, math and cognate courses require grades of C or better.

1 Core Biology Courses - 15cr (Required)

		Prereqs	Sem	Grade
BIOL 200	Concepts in Biology (4cr)	△□	None	
R120:201	Found of Cell/Molec (3cr)	△□●	BIOL 200	
R120:202	Found of Cell/Molec Lab (1cr)	△□●	BIOL 200	
BIOL 205	Found of Ecol/Evol (3cr)	△□●	BIOL 200	
BIOL 206	Found of Ecol/Evol Lab (1cr)	△□●	BIOL 200	
MATH 373	Introduction to Math-Biology	□	M211/337	

2A Ecology and Evolution - 3cr (Choose one class)

BIOL 222	Evolution	△	101/102	
R120:280	Ecology	□	101/102	
R120:282	Animal Behavior	△	101/102	
R120:370	Plant Ecology	□	101/102	

2B Functional Organism - 4cr (Choose one class)

R120:211	Plant Kingdom	□	101/102	
R120:230	Biology of Seed Plants	△	201/202	
R120:330	Plant Physiology	△	201/202	
R120:335	General Microbiology	△	101/102	
R120:340	Mammalian Physiology	△□●	201/202	
R120:342/3	Developmental Biol & Lab	△	201/202	

2C Molecular and Cellular - 3cr (Choose one class)

R120:352	Genetics	□●	201/202	
R120:355	Cell Biology	□	201/202	
R120:356	Molecular Biology	△	201/202	
R120:360	Biochemistry	△●	201/202	

3 Bio Laboratory Courses - 7cr (Choose at least one 4-credit lab class)

↓ Four Credit Laboratories (4cr) ↓				
R120:211	Plant Kingdom	□	101/102	
R120:227	Biology of Invertebrates	△●	101/102	
R120:230	Biology of Seed Plants	△	201/202	
R120:285	Comparative Vertebrate Anatomy	△	101/102	
R120:311	Taxonomy of Vascular Plants	△	211 or 230	
R120:313	Mycology	△	101/102	
R120:325/6	Animal Parasites & Lab	□	201/202	
R120:330	Plant Physiology	△	201/202	
R120:335	General Microbiology	△	101/102	
R120:340	Mammalian Physiology	△□●	201/202	
R120:342/3	Developmental Biol & Lab	△	201/202	
R120:405	Microanatomy of Cells & Tissues	□	201/202	
R120:430	Plant Growth & Development	△□	201/202	
BIOL 451	Cell Physiology & Imaging	□	355, Phys 111	
↓ Three Credit Laboratories (3cr) ↓				
R120:328	Ecology of Birds	□	280 or 270	
R120:380	Field Ecology	□	280	
R120:371	Field Studies Plant Ecol		280 or 270	
R120:381	Field Studies Animal Ecol	△	280	
BIOL 475	Analytical Field Methods	△	280 or 270	
R120:486	Tropical Field Biology	●		

4 Mathematical Biology Electives - 3cr (Choose one class)

Math 371	Physiology & Medicine	△	Math 222	
Math 372	Population Biology		Math 222	
Math 430	Computational Neuroscience	△	M211++	

35 Required Biology Credits

Current Total: _____

5 Core Math Courses - 39cr (Required)

		Prereqs	Sem	Grade
MATH 111	Calculus I (4cr)	△□●		
MATH 112	Calculus II (4cr)	△□●	Math 111	
MATH 211	Calculus IIIA (3cr)	△□●	Math 112	
MATH 222	Differential Equations (4cr)	△□●	Math 112	
MATH 331	Partial Differential Equat. (3cr)	△□	M211/222	
MATH 332	Complex Variable (3cr)	△□	M211/222	
MATH 333	Probability and Statistics (3cr)	△□●	Math 112	
MATH 337	Linear Algebra (3cr)	△□●	Math 112	
MATH 340	Applied Numerical Methods (3cr)	△□	211+	
MATH 450	Methods of Applied Math I (3cr)	△	M331/337+	
MATH 451	Methods of Applied Math II (3cr)	□	Math 450	
MATH 480	Intro Mathematical Analysis (3cr)	△	Math 211	

39 Required Mathematics Credits

Current Total: _____

6A Cognate Science Courses - 23cr

CHEM 124	General Chem Lab (1cr)	△□●	Chem 125	
CHEM 125	General Chemistry I (3cr)	△□●	Placement	
CHEM 126	General Chemistry II (3cr)	△□●	Chem 125	

CHEM 243	Organic Chemistry I (3cr)	△□●	Chem 126	
CHEM 244	Organic Chemistry II (3cr)	△□●	Chem 243	
CHEM 244A	Organic Chemistry Lab (2cr)	△□●	Chem 243	

PHYS 111	Physics I Lab (3cr)	△□●		
PHYS 111A	Physics I Lab (1cr)	△□●		
PHYS 121	Physics II (3cr)	△□●	Phys 111	
PHYS 121A	Physics II Lab (1cr)	△□●	Phys 111A	

*Chem 121, 122 and 123 are equivalent to Chem 125 and 126.
Phys 105, 106 and 121 are equivalent to Phys 111 and 121.
Placement test results determine the appropriate sequence of courses.*

6B Cognate Computer Science Course - 6cr

BNFO 135	Bioinformatics I (3cr)	△□		
BNFO 136	Bioinformatics II (3cr)	△□	BNFO 135	

CS 115 and CS 116 can be used to fulfill the BNFO 135/136 requirements.

29 Required Cognate Course Credits

Current Total: _____

△ Fall □ Spring ● Summer



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General University Requirements for Biology-Math Double Majors

7 English & Cultural History GUR - 9cr

	Course	Prereqs	Sem	Grade
English Composition: Writing, Speaking, Thinking I (3cr)	HUM 101	Placement		
English Composition: Writing, Speaking, Thinking II (3cr)	HUM 102	HUM 101		
GUR Elective: English and Cultural History ¹ (3cr)				

¹ Choice of HUM 211, HUM 212 or HIST 213; or any approved 200-level History course at Rutgers Newark.

8 Physical Education GUR - 2cr

	Course	Prereqs	Sem	Grade
GUR Elective: Physical Education (1cr)				
GUR Elective: Physical Education (1cr)				

9 Basic Social Sciences GUR - 6cr

	Course	Prereqs	Sem	Grade
GUR Elective: Social Sciences ² (3cr)				
GUR Elective: Social Sciences ² (3cr)				

² Two Courses: EPS 202, ECON 201, ECON 265, ECON 266, STS 257, STS 258; or approved Social Science courses at Rutgers Newark.

10 Management GUR - 3cr

	Course	Prereqs	Sem	Grade
Principles of Management (3cr)	MGMT 390			

11 Humanities and Social Science Upper Level GUR - 6cr

	Course	Prereqs	Sem	Grade
GUR Elective: HSS Upper Level Elective ³ (3cr)				
GUR Elective: HSS Upper Level Elective ³ (3cr)				

³ Two Courses: 300-level courses in COM, ENG, HIST, LIT, PHIL, STS, THTR; or approved 300-level or above HSS courses at Rutgers Newark.

12 Humanities and Social Science Senior Seminar GUR - 3cr

	Course	Prereqs	Sem	Grade
GUR Elective: HSS Senior Seminar ⁴ (3cr)				

⁴ Choice of HSS 403, 404, 405, 406, 407, 408, 409, 491.

29 General University Requirement Credits

Current Total: _____

Notes and Comments: _____