

YEAR 1

Fall Semester		Cr.	Spring Semester		Cr.
HUM 101	English I	3	HUM 102	English Composition II	3
Math 111	Calculus I	4	Phys 121	Physics II	3
Phys 111	Physics I	3	Phys 121A	Physics II Laboratory	1
Phys 111A	Physics I Laboratory	1	Chem 124	General Chemistry Laboratory	1
Chem 125	General Chemistry I	3	Chem 126	General Chemistry II	3
BIOL 200	Concepts in Biology	4	R120:201/202	Foundations of Cell/Molec	4
Frsh Sem	Freshman Seminar	0	GUR Elective	Social Sciences ¹	3
		<u>18</u>			<u>18</u>

Summer Semester I		Cr.	☞
GUR Elective	English and Cultural History ²	3	
GUR Elective	Social Sciences	3	
		<u>6</u>	

YEAR 2

Fall Semester		Cr.	Spring Semester		Cr.
Math 105	Probability & Statistics-GUR	3	Biology Elective	Cluster Elective - Functional Org.	4
BNFO 135	Bioinformatics I	3	Biology Elective	Cluster Elective - Ecol/Evol	3
BIOL 205/206	Foundation of Ecol/Evol	4	Chem 244	Organic Chemistry II	3
Chem 243	Organic Chemistry I	3	Chem 244A	Organic Chemistry Lab	2
GUR Elective	HSS Upper Level ³	3	Elective	Technical Elective ⁴	3
GUR Elective	Physical Education	1	GUR Elective	Physical Education	1
		<u>17</u>			<u>16</u>

☞		Summer Semester II		Cr.
		GUR Elective	HSS Upper Level	3
		GUR Elective	Management ⁵	3
				<u>6</u>

YEAR 3

Fall Semester		Cr.	Spring Semester		Cr.
Biology Elective	Cluster Elective - Molec/Cell	3	Biology Elective	BIO Laboratory Elective	3
Biology Elective	BIO Laboratory Elective ⁶	4	Biology Elective	Biology Elective	3
Biology Elective	Biology Elective	3	Biology Elective	Biology Elective	3
GUR Elective	HSS Senior Seminar	3	Elective	Technical Elective	3
Elective	Free Elective or COOP ⁷	3	Elective	Free Elective	3
		<u>16</u>			<u>15</u>

Total Minimum Credits: 112



Biology Credits: 38

¹ Social Science Electives: EPS 202, ECON 201/265/266, STS 257/258, approved Rutgers courses.

² English & Cultural History: HUM 211, 212 or HIST 213, approved Rutgers courses.

³ HSS Upper Level: 300-level course in COM, ENG, HIST, LIT, PHIL, STS, THTR, or approved Rutgers courses.

⁴ Technical Electives: Any course in biology, chemistry, math or physics beyond major requirements. Any course in environmental science, computer science or engineering.

⁵ Management Elective: Choice of HRM 301, MGMT 390, ENTR 410 or IE 492.

⁶ Laboratory Elective: Choice of *one* 3 credit and *one* 4 credit laboratory.

⁷ Students enrolled in the optometry program must complete one semester of Cooperative Education.

**REQUIRED CORE BIOLOGY COURSES ~ 12 Credits**

- R120/BIOL 200 Concepts in Biology* (4cr) **Effective from Fall 2011*
- R120:201 Foundations of Cell & Molecular Biology Lecture (3cr)
- R120:202 Foundations of Cell & Molecular Biology Lab (1cr)
- BIOL 205 Foundations of Ecology & Evolution Lecture (3cr)
- BIOL 206 Foundations of Ecology & Evolution Lab (1cr)

CONCEPT CLUSTER COURSES ~ 10 Credits

Accelerated Majors must *complete one course from each of* the following three concept cluster elective categories.

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|---|---|
| <ul style="list-style-type: none"><input type="checkbox"/> Ecological and Evolutionary Framework (3cr)
Evolution (BIOL 222)
Ecology (R120:280)
Animal Behavior (R120:282)
Plant Ecology (R120:370) | <ul style="list-style-type: none"><input type="checkbox"/> Molecular and Cellular Mechanisms (3cr)
Genetics (R120:352)
Cell Biology (R120:355)
Molecular Biology (R120:356)
Biochemistry (R120:360) |
| ↓ | ↓ |
| <ul style="list-style-type: none"><input type="checkbox"/> The Functional Organism (4cr)
Plant Kingdom (R120:211)
Biology of Seed Plants (R120:230)
Plant Physiology (R120:330) | <ul style="list-style-type: none"><input type="checkbox"/> Molecular and Cellular Mechanisms (3cr)
General Microbiology (R120:335)
Mammalian Physiology (R120/BIOL 340)
Developmental Biology & Lab (R120:342/343) |

LABORATORY/FIELD EXPERIENCE ~ 7 Credits

Accelerated Majors must *complete one 3 credit and one 4 credit lab* in this category:

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| <ul style="list-style-type: none"><input type="checkbox"/> Four Credit Laboratories (4cr)
Plant Kingdom (R120:211)
Biology of Invertebrates (R120:227)
Biology of Seed Plants (R120:230)
Comparative Vertebrate Anatomy (R120:285)
Taxonomy of Vascular Plants (R120:311)
Mycology (R120:313)
Animal Parasites & Parasitology Lab (R120:325/326) | <ul style="list-style-type: none">Four Credit Laboratories (cont.)
Plant Physiology (R120:330)
General Microbiology (R120:335)
Mammalian Physiology (R120:340)
Developmental Biology & Lab (R120:342/343)
Microanatomy of Tissues (R120:405)
Plant Growth and Development (R120:430)
Cell Physiology and Imaging (BIOL 451) |
| <ul style="list-style-type: none"><input type="checkbox"/> Three Credit Laboratories (3cr)
Ecology of Birds (R120:328)
Field Plant Ecology (R120:371)
Field Ecology (R120:380) | <ul style="list-style-type: none">Three Credit Laboratories (cont.)
Field Animal Ecology (R120:381)
Analytical Field Ecology (BIOL 475)
Tropical Field Ecology-2cr (R120:485) |

BIOLOGY ELECTIVES ~ 9 Credits

The courses listed below may be used to complete the 38 required credits of biology course work, once approved by the Advisor:

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| <ul style="list-style-type: none">Animal Parasites (R120:325)Developmental Biology (R120:342)Comparative Physiology (R120:345)Neurobiology (R120/BIOL 346)Immunology (R120:350)Human Ecology (R120:365)Conservation Biology (BIOL 375)Neural Basis of Behavior (BIOL 383)Ecology and Evolution of Disease (BIOL 368)Biology of Cancer (R120:402)Biological Invasions (R120:422) | <ul style="list-style-type: none">Cell Biology of Disease (BIOL 440)Endocrinology (R120:445)Cellular and Systems Neuroscience (BIOL 447)Neuropathophysiology (BIOL 448)Molecular Cell Biology (R120:455)Virology (R120:456)Environmental Assessment (R120:472)Research and Independent Study (BIOL 491)Research and Independent Study (BIOL 492)Seminar in Biology (R120:493)Seminar in Biology (R120:494) |
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