


YEAR 1						
Fall Semester			Cr.	Spring Semester		Cr.
HUM 101	English I		3	GUR Elective	Social Sciences <sup>1</sup>	3
Math 111	Calculus I		4	HUM 102	English Composition II	3
Chem 125	General Chemistry I		3	R830:101	Principles of Psychology	3
BNFO 135	Bioinformatics I		3	Chem 124	General Chemistry Laboratory	1
BIOL 200	Concepts in Biology		4	Chem 126	General Chemistry II	3
Frsh Sem	Freshman Seminar		0	R120:201/202	Foundations of Cell/Molec	4
			<u>17</u>			<u>17</u>
Summer Semester I			Cr.	☒		
BIOL 310	PT COOP		3			
BIOL 410	PT COOP		3			
			<u>6</u>			
YEAR 2						
Fall Semester			Cr.	Spring Semester		Cr.
Math 105	Probability & Statistics-GUR		3	R120/BIOL 340	Mammalian Physiology	4
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	English and Cultural History <sup>2</sup>		3	Biology Elective	Cluster Elective - Molec/Cell	3
Biology Elective	Cluster Elective - Ecol/Evol		3	Elective	Free Elective	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 <sup>3</sup>	3
				GUR Elective	Management <sup>4</sup>	3
						<u>6</u>
YEAR 3						
Fall Semester			Cr.	Spring Semester		Cr.
Phys 111	Physics I		3	Phys 121	Physics II	3
Phys 111A	Physics I Laboratory		1	Phys 121A	Physics II Laboratory	1
R120:320	Comparative Vertebrate Anatomy		4	Biology Elective	BIO Laboratory Elective <sup>5</sup>	3
Biology Elective	Biology Elective		3	Biology Elective	Biology Elective	3
GUR Elective	HSS Upper Level		3	Biology Elective	Biology Elective	3
Elective	Free Elective		3	GUR Elective	HSS Senior Seminar	3
			<u>17</u>			<u>16</u>
<b>Total Minimum Credits: 112</b>						<b>Biology Credits: 38</b>

<sup>1</sup> Social Science Elective: EPS 202, ECON 201/265/266, STS 257/258, approved Rutgers courses.

<sup>2</sup> English and Cultural History Elective: HUM 211, 212 or HIST 213, approved Rutgers courses.

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

<sup>4</sup> Management Elective: Choice of HRM 301, MGMT 390, ENTR 410 or IE 492.

<sup>5</sup> Laboratory Elective: 3 or 4 credit laboratory.

**REQUIRED CORE BIOLOGY COURSES ~ 20 Credits**

- ☐ R120/BIOLOGY 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)
- ☐ BIOLOGY 205 Foundations of Ecology & Evolution Lecture (3cr)
- ☐ BIOLOGY 206 Foundations of Ecology & Evolution Lab (1cr)
- ☐ R120/BIOLOGY 340 Mammalian Physiology (4cr)\*\*
- ☐ R120:320 Comparative Vertebrate Anatomy (4cr)

**CONCEPT CLUSTER COURSES ~ 6 Credits**

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

**\*\*NOTE:** Required course Mammalian Physiology (R120/BIOLOGY 340) satisfies The Functional Organism (4cr) Concept Cluster requirement.

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

**LABORATORY/FIELD EXPERIENCE ~ 3 or 4 Credits**

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

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| <ul style="list-style-type: none"> <li>☐ <b>Four Credit Laboratories</b> (4cr)           <ul style="list-style-type: none"> <li>Plant Kingdom (R120:211)</li> <li>Biology of Invertebrates (R120:227)</li> <li>Biology of Seed Plants (R120:230)</li> <li>Comparative Vertebrate Anatomy (R120:285)</li> <li>Taxonomy of Vascular Plants (R120:311)</li> <li>Mycology (R120:313)</li> <li>Animal Parasites &amp; Parasitology Lab (R120:325/326)</li> </ul> </li> <li>☐ <b>Three Credit Laboratories</b> (3cr)           <ul style="list-style-type: none"> <li>Ecology of Birds (R120:328)</li> <li>Field Plant Ecology (R120:371)</li> <li>Field Ecology (R120:380)</li> </ul> </li> </ul> | <p><b>Four Credit Laboratories (cont.)</b></p> <ul style="list-style-type: none"> <li>Plant Physiology (R120:330)</li> <li>General Microbiology (R120:335)</li> <li>Mammalian Physiology (R120:340)</li> <li>Developmental Biology &amp; Lab (R120:342/343)</li> <li>Microanatomy of Tissues (R120:405)</li> <li>Plant Growth and Development (R120:430)</li> <li>Cell Physiology and Imaging (BIOLOGY 451)</li> </ul> <p><b>Three Credit Laboratories (cont.)</b></p> <ul style="list-style-type: none"> <li>Field Animal Ecology (R120:381)</li> <li>Tropical Field Ecology-2cr (R120:485)</li> </ul> |
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**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"> <li>Insects and Human Society (BIOLOGY 225)</li> <li>Neurobiology (BIOLOGY/R120:346)</li> <li>Human Ecology (R120:365)</li> <li>Physiology and Medicine (Math 371)</li> <li>Population Biology (Math 372)</li> <li>Introduction to Math Biology (Math 373)</li> <li>Biological Ultrastructure (R120:403)</li> </ul> | <ul style="list-style-type: none"> <li>Light &amp; Elect Microscope (R120:404)</li> <li>Biological Invasions (R120:422)</li> <li>Comp Neuroscience (Math 430)</li> <li>Immunology (R120:443)</li> <li>Endocrinology (R120:445)</li> <li>Cell &amp; Systems Neurosci (Biol 447)</li> <li>Cell Physiology &amp; Imaging-4cr (Biol 451)</li> </ul> | <ul style="list-style-type: none"> <li>Cellular Biophysics-4cr (R120:451)</li> <li>Molecular Biotechnology-4cr (R120:452)</li> <li>Molecular Cell Biology (R120:455)</li> <li>Ecological Physiology (R120:471)</li> <li>Systems Ecology (R120:487)</li> <li>Problems in Biology-6cr (BIOLOGY 491/492)</li> </ul> |
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