

**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	COOP	3	
GUR Elective	English and Cultural History <sup>2</sup>	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
R120:241	Anatomy & Physiology I <sup>3</sup>	4	R120:242	Anatomy & Physiology II <sup>3</sup>	4
Biology Elective	Biology Elective	3	Biology Elective	Cluster Elective - Ecol/Evol <sup>4</sup>	3
GUR Elective	Physical Education	1	GUR Elective	Physical Education	1
		<u>18</u>			<u>17</u>

**Summer Semester II**

		Cr.
GUR Elective	Management <sup>5</sup>	3
		<u>3</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	R120:352	Genetics	3
R120:335	Microbiology	4	Biology Elective	Biology Elective	3
R120:360	Biochemistry	3	GUR Elective	HSS Upper Level	3
GUR Elective	HSS Upper Level <sup>6</sup>	3	GUR Elective	HSS Senior Seminar	3
		<u>18</u>			<u>16</u>

**Total Minimum Credits: 112**

**Biology Credits: 39**
<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> Anatomy & Physiology I & II do not count towards the biology major, but is strongly recommended for MS Physician Assistant Program.

<sup>4</sup> Biology Cluster Elective - Ecology & Evolution: Choice of BIOL 222, R120:280, R120:282, or R120:370.

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

<sup>6</sup> HSS Upper: 300-level course in COM, ENG, HIST, LIT, PHIL, STS, THTR, or approved Rutgers courses.



### REQUIRED CORE BIOLOGY COURSES ~ 30 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)
- ❑ R120:320 Comparative Vertebrate Anatomy (4cr)
- ❑ R120:335 General Microbiology (4cr)
- ❑ R120/BIOL 340 Mammalian Physiology (4cr)
- ❑ R120:352 Genetics (3cr)
- ❑ R120:360 Biochemistry (3cr)

### CONCEPT CLUSTER COURSES ~ 3 Credits

*Accelerated Majors must complete one course from the following concept cluster elective category.*

- ❑ **Ecological and Evolutionary Framework (3cr)**
  - Evolution (BIOL 222)
  - Ecology (R120:280)
  - Animal Behavior (R120:282)
  - Plant Ecology (R120:370)

### BIOLOGY ELECTIVES ~ 6 Credits

*The courses listed below may be used to complete the 39 required credits of biology course work, once approved by the Advisor:*

- |   |  |
|---|--|
| Animal Parasites (R120:325)                 | Cell Biology of Disease (BIOL 440)           |
| Developmental Biology (R120:342)            | Endocrinology (R120:445)                     |
| Comparative Physiology (R120:345)           | Cellular and Systems Neuroscience (BIOL 447) |
| Neurobiology (R120/BIOL 346)                | Neuropathophysiology (BIOL 448)              |
| Immunology (R120:350)                       | Molecular Cell Biology (R120:455)            |
| Human Ecology (R120:365)                    | Virology (R120:456)                          |
| Conservation Biology (BIOL 375)             | Environmental Assessment (R120:472)          |
| Neural Basis of Behavior (BIOL 383)         | Research and Independent Study (BIOL 491)    |
| Ecology and Evolution of Disease (BIOL 368) | Research and Independent Study (BIOL 492)    |
| Biology of Cancer (R120:402)                | Seminar in Biology (R120:493)                |
| Biological Invasions (R120:422)             | Seminar in Biology (R120:494)                |