



**Accelerated BA BIOLOGY / MD, DMD, DDS, OD**

**112 Credit Minimum**

**Checklist**

**FIRST YEAR**

| 1st Semester |                       | Cr. | Sem | Grade |
|--------------|-----------------------|-----|-----|-------|
| R120:101     | General Biology I     | 4   |     |       |
| Chem 125     | General Chemistry I   | 3   |     |       |
| Math 111     | Calculus I - GUR      | 4   |     |       |
| Phys 111     | Physics I             | 3   |     |       |
| Phys 111A    | Physics I Lab         | 1   |     |       |
| HUM 101      | English -GUR          | 3   |     |       |
| Frsh Sem     | Freshman Seminar -GUR | 0   |     |       |

| 2nd Semester |                      | Cr. | Sem | Grade |
|--------------|----------------------|-----|-----|-------|
| R120:102     | General Biology II   | 4   |     |       |
| Chem 124     | General Chem. Lab    | 1   |     |       |
| Chem 126     | General Chemistry II | 3   |     |       |
| Phys 121     | Physics II           | 3   |     |       |
| Phys 121A    | Physics II Lab       | 1   |     |       |
| HUM 102      | English II - GUR     | 3   |     |       |
|              | Social Science - GUR | 3   |     |       |

| Summer I |                                  | Cr. | Sem | Grade |
|----------|----------------------------------|-----|-----|-------|
|          | English and Cultural History-GUR | 3   |     |       |
|          | Social Science                   | 3   |     |       |

**SECOND YEAR**

| 1st Semester |                              | Cr. | Sem | Grade |
|--------------|------------------------------|-----|-----|-------|
| 120:201/202  | Foundations of Biology       | 4   |     |       |
| Chem 243     | Organic Chemistry I          | 3   |     |       |
| Math 105     | Probability & Statistics-GUR | 3   |     |       |
|              | HSS Upper Level - GUR        | 3   |     |       |
| BNFO 135     | Prog. For Bioinformatics I   | 3   |     |       |
| GUR Elective | Physical Education           | 1   |     |       |

| 2nd Semester |                          | Cr. | Sem | Grade |
|--------------|--------------------------|-----|-----|-------|
| Elective     | Biology with Lab         | 4   |     |       |
| Elective     | Biology                  | 3   |     |       |
| Chem 244     | Organic Chemistry II     | 3   |     |       |
| Chem 244A    | Organic Chemistry Lab    | 2   |     |       |
|              | Free Elective            | 3   |     |       |
|              | Physical Education - GUR | 1   |     |       |

| Summer II |                       | Cr. | Sem | Grade |
|-----------|-----------------------|-----|-----|-------|
|           | HSS Upper Level - GUR | 3   |     |       |
|           | Management - GUR      | 3   |     |       |

**THIRD YEAR**

| 1st Semester |                                    | Cr. | Sem | Grade |
|--------------|------------------------------------|-----|-----|-------|
|              | Biology with Lab                   | 4   |     |       |
|              | Biology                            | 3   |     |       |
|              | Biology                            | 3   |     |       |
|              | Technical Elective <sup>1</sup>    | 3   |     |       |
|              | Free Elective or COOP <sup>2</sup> | 3   |     |       |

| 2nd Semester |                                 | Cr.    | Sem | Grade |
|--------------|---------------------------------|--------|-----|-------|
|              | Biology with Lab                | 3 or 4 |     |       |
|              | Biology                         | 3      |     |       |
|              | Honors Senior Seminar - GUR     | 3      |     |       |
|              | Technical Elective <sup>1</sup> | 3      |     |       |
|              | Free Elective                   | 3      |     |       |

Minimum Cr. 112

Biology Cr.: 35 (including General Biology I, II, and Foundations of Biology)

<sup>1</sup> Technical Electives - Any course in biology chemistry, mathematics or physics beyond what is required for the major. Any course in architecture (except history), environmental science, computer science or engineering.

<sup>2</sup> Students enrolled in optometry program must complete one semester of Cooperative Education.



**BIOLOGY ELECTIVES MUST BE CHOSEN AS OUTLINED BELOW:**

**One course must be taken from A, B, and C**

**A. ECOLOGY AND EVOLUTION**

*All courses three Cr.*

Evolution (120:222 & Biol 222)  
Ecology & Evolution of Disease (Biol 368)  
Plant Ecology (120:270)  
Ecology (120:280)  
Animal Behavior (120:382)  
Neural Basis of Behavior (Biol 383)

**B. THE FUNCTIONAL ORGANISM**

*All courses four Cr.*

Plant Kingdom (120:211)  
Biology of Seed Plants (120:230)  
Plant Physiology (120:330)  
General Microbiology (120:335)  
Mammalian Physiology (120:340)  
Developmental Biology & Lab (120:342 & 343)

**C. MOLECULAR AND CELLULAR MECHANISMS**

*All courses three Cr.*

Genetics (120:352)  
Cell Biology (120:355)  
Molecular Biology (120:356)  
Biochemistry (120:360 OR Chem 473)

**D. MAJORS ARE REQUIRED TO HAVE AT TWO ADDITIONAL LABORATORY OR FIELD COURSES CHOSEN FROM SECTION B ABOVE OR FROM THE LIST BELOW:**

**Laboratory Courses (4 cr.)**

Biology of Invertebrates (120:227)  
Comparative Vertebrate Anatomy (120:285)  
Taxonomy of Vascular Plants (120:311)  
Animal Parasites & Lab (120:325 & 326)  
Microanatomy (120:358)  
Mycology (120:413)  
Plant Growth & Dev. (120:430)  
Marine Biology (120:481)

**Laboratory Courses (3 cr.)**

Ecology of Birds (120:328)  
Field Studies in Plant Ecology (120:371)  
Field Studies in Animal Ecology (120:381)  
Field Ecology (120:380)

**Laboratory Courses (2 cr.)**

Tropical Field Biology (120:486)

**E. THE COURSES LISTED BELOW MAY BE USED TO COMPLETE 35 Cr. OF BIOLOGY COURSE WORK**

*All courses three Cr. unless specified*

Insects and Human Society (Biol 225)  
Neurobiology (120:346)  
Human Ecology (120:365)  
Physiology and Medicine (Math 371)  
Population Biology (Math 372)  
Introduction to Math Biology (Math 373)  
Biological Ultrastructure (120:403)  
Light & Elect Microscope (120:404)  
Cell Physiology & Imaging (Biol 405)  
Biological Invasions (120:422)

Computational Neuroscience (Math 430)  
Immunology (120:443)  
Endocrinology (120:445)  
Cellular and Systems Neuroscience (Biol 447)  
Cellular Biophysics (120:451) 4 crs.  
Molecular Biotechnology (120:452) 4 crs.  
Molecular Cell Biology (120:455)  
Ecological Physiology (120:471)  
Systems Ecology (120:487)  
Problems in Biol. BIOL 491-492 (6crs. max.)