

**DEPARTMENT OF BIOLOGY**  
**ADVISING PLANNING SHEET**  
**FULL CONCENTRATION -- Biology**

Fall Semester

Spring Semester

**Year One**

\_\_\_\_\_ **BIO 201** (General Biology I)  
\_\_\_\_\_ **CHE 105** (Analytical Chemistry I)  
(General Studies Natural Science)

\_\_\_\_\_ **BIO 202** (General Biology II)  
\_\_\_\_\_ **CHE 106** (Analytical Chemistry II)  
(Prerequisite CHE 105)

**Year Two**

\_\_\_\_\_ **BIO 203** (General Biology III)  
\_\_\_\_\_ **CHE 207**(Organic Chemistry I)  
(Prerequisite CHE 106)  
\_\_\_\_\_ **MAT 107** (Calculus & Analytic Geometry I) or \_\_\_\_\_ **BIO 300** (Biometry)  
(Gen. Studies Quantitative Reasoning) (Gen. Studies Quantitative Reasoning)

**Year Three**

\_\_\_\_\_ **BIO 300 - level** \_\_\_\_\_ **BIO 300 - level**  
\_\_\_\_\_ **CHE 325** (Biochemistry I) \_\_\_\_\_ **BIO 300 - level**  
\_\_\_\_\_ or **BIO 300 – level**

**Year Four**

\_\_\_\_\_ **BIO 300 - / 400\* - level** \_\_\_\_\_ **BIO 300 - / 400\* – level**

\* A 400 level seminar must be taken either semester

One course from each of the following three groups must be taken:

\_\_\_\_\_ Group One

**BIO 311** (Ecology) **BIO 314** (Plant Taxonomy)  
**BIO 312** (Wetlands Ecology) **BIO 315** (Watershed Hydrology & Water Resources)

\_\_\_\_\_ Group Two

**BIO 321** (General Bacteriology) **BIO 342** (Evolution)  
**BIO 327** (Histology & Microtechniques) **BIO 343** (Molecular Genetics)  
**BIO 332** (Cell Biology)

\_\_\_\_\_ Group Three

**BIO 304** (General Botany) **BIO 324** (Comparative Vertebrate Anatomy)  
**BIO 323** (Developmental Biology) **BIO 330** (Vertebrate Physiology)  
**BIO 334** (Vertebrate Natural History)

**DEPARTMENT OF BIOLOGY**  
**ADVISING PLANNING SHEET**  
**BIOTECHNOLOGY TRACK**

Fall Semester

Spring Semester

**Year One**

\_\_\_\_\_ **BIO 201** (General Biology I)  
\_\_\_\_\_ **CHE 105** (Analytical Chemistry I)  
(General Studies Natural Science)

\_\_\_\_\_ **BIO 202** (General Biology II)  
\_\_\_\_\_ **CHE 106** (Analytical Chemistry II)  
(Prerequisite CHE 105)

**Year Two**

\_\_\_\_\_ **BIO 203** (General Biology III)  
\_\_\_\_\_ **CHE 207**(Organic Chemistry I)  
(Prerequisite CHE 106)  
\_\_\_\_\_ **MAT 107**(Calculus & Analytic Geometry I) or  
(Gen. Studies Quantitative Reasoning)  
\_\_\_\_\_ **Track / Group One or Three**

\_\_\_\_\_ **Track / Group One or Three**  
\_\_\_\_\_ **CHE 208** (Organic Chemistry II)  
(Prerequisite CHE 207)  
\_\_\_\_\_ **BIO 300** (Biometry)  
(Gen. Studies Quantitative Reasoning)

**Year Three**

\_\_\_\_\_ **Track / Group One or Three**  
\_\_\_\_\_ **Track / Group One or Three**

\_\_\_\_\_ **Track / Group One or Three**  
\_\_\_\_\_ **Track / Group One or Three**

**Year Four**

\_\_\_\_\_ **Track / Group One or Three**

\_\_\_\_\_ **Track / Group One or Three**

Six of the following track courses, with one being a 400 – level course:

**BIO 321** (General Bacteriology)  
**BIO 327** (Histology & Microtechniques)  
**BIO 332** (Cell Biology)  
**BIO 343** (Molecular Genetics)

**BIO 495** (Molecular Biology Seminar)  
**BIO 496** (Scientific & Biomedical Imaging)  
**BIO 498** (Immunology Seminar)  
**CHE 325** (Biochemistry I)

One course from either of the following two groups must be taken:

\_\_\_\_\_ Group One

**BIO 311** (Ecology)  
**BIO 312** (Wetlands Ecology)

**BIO 314** (Plant Taxonomy)  
**BIO 315** (Watershed Hydrology & Water Resources)

\_\_\_\_\_ Group Three

**BIO 304** (General Botany)  
**BIO 323** (Developmental Biology)

**BIO 324** (Comparative Vertebrate Anatomy)  
**BIO 330** (Vertebrate Physiology)  
**BIO 334** (Vertebrate Natural History)

**DEPARTMENT OF BIOLOGY**  
**ADVISING PLANNING SHEET**  
**PRE-PROFESSIONAL -- Pre-Medical**

Fall Semester

Spring Semester

**Year One**

\_\_\_\_\_ **BIO 201** (General Biology I)  
\_\_\_\_\_ **CHE 105** (Analytical Chemistry I)  
(General Studies Natural Science)

\_\_\_\_\_ **BIO 202** (General Biology II)  
\_\_\_\_\_ **CHE 106** (Analytical Chemistry II)  
(Prerequisite CHE 105)

**Year Two**

\_\_\_\_\_ **BIO 203** (General Biology III)  
\_\_\_\_\_ **CHE 207**(Organic Chemistry I)  
(Prerequisite CHE 106)  
\_\_\_\_\_ **MAT 107** (Calculus & Analytic Geometry I)  
(General Studies Quantitative Reasoning)

\_\_\_\_\_ **BIO 300 – level**  
\_\_\_\_\_ **CHE 208** (Organic Chemistry II)  
(Prerequisite CHE 207)  
\_\_\_\_\_ **MAT 108** (Calculus & Analytic  
Geometry II)  
(Prerequisite MAT 107)

**Year Three**

\_\_\_\_\_ **BIO 300 - level**  
\_\_\_\_\_ **PHY 201** (General Physics I)  
\_\_\_\_\_ **CHE 325** (Biochemistry I)  
(Prerequisite CHE 208)

\_\_\_\_\_ **BIO 300 – level**  
\_\_\_\_\_ **PHY 202** (General Physics II)  
(Prerequisite PHY 201 & MAT 108)  
\_\_\_\_\_ **BIO 300 - level**

**Year Four**

\_\_\_\_\_ **BIO 300 - / 400 - level**

\_\_\_\_\_ **BIO 300 - / 400 – level**

One course from each of the following three groups must be taken:

\_\_\_\_\_ Group One

**BIO 311** (Ecology)  
**BIO 312** (Wetlands Ecology)

**BIO 314** (Plant Taxonomy)  
**BIO 315** (Watershed Hydrology & Water Resources)

\_\_\_\_\_ Group Two

**BIO 321** (General Bacteriology)  
**BIO 327** (Histology & Microtechniques)  
**BIO 332** (Cell Biology)

**BIO 342** (Evolution)  
**BIO 343** (Molecular Genetics)

\_\_\_\_\_ Group Three

**BIO 304** (General Botany)  
**BIO 323** (Developmental Biology)

**BIO 324** (Comparative Vertebrate Anatomy)  
**BIO 330** (Vertebrate Physiology)  
**BIO 334** (Vertebrate Natural History)

**DEPARTMENT OF BIOLOGY**  
**ADVISING PLANNING SHEET**  
**COMBINED CONCENTRATION -- Biology**

Fall Semester

Spring Semester

**Year One**

\_\_\_\_\_ **BIO 201** (General Biology I)

\_\_\_\_\_ **BIO 202** (General Biology II)

**Year Two**

\_\_\_\_\_ **BIO 203** (General Biology III)

**Year Three**

\_\_\_\_\_ **BIO 300 – level** (from group, below)

\_\_\_\_\_ **BIO 300 – level** (from group, below)

\_\_\_\_\_ **BIO 300 – level** (from group,  
below)

**Year Four**

\_\_\_\_\_ **BIO 400 – level**

**Note**

One course from each of the following three groups must be taken:

\_\_\_\_\_ Group One

**BIO 311** (Ecology)

**BIO 312** (Wetlands Ecology)

**BIO 314** (Plant Taxonomy)

**BIO 315** (Watershed Hydrology & Water Resources)

\_\_\_\_\_ Group Two

**BIO 321** (General Bacteriology)

**BIO 327** (Histology & Microtechniques)

**BIO 332** (Cell Biology)

**BIO 342** (Evolution)

**BIO 343** (Molecular Genetics)

\_\_\_\_\_ Group Three

**BIO 304** (General Botany)

**BIO 323** (Developmental Biology)

**BIO 324** (Comparative Vertebrate Anatomy)

**BIO 330** (Vertebrate Physiology)

**BIO 334** (Vertebrate Natural History)

**DEPARTMENT OF BIOLOGY**  
**ADVISING PLANNING SHEET**  
**SPECIAL PROGRAM – Marine Science**

SIX courses are required for the marine science program:

\_\_\_\_\_ **BIO 202** (General Biology II)

\_\_\_\_\_ **BIO 311** (Ecology)

\_\_\_\_\_ \_\_\_\_\_ **Four** Marine Science courses offered through Duke University. Students study at the Duke Marine Laboratory in Beaufort, NC and at the Bermuda Biological Station for Research. Students must apply to the Biology Department for admission to this program\*, which will normally be completed during the junior or senior year. Scuba certification is recommended.

Two of the marine science courses may be applied toward concentrations in either Biology or Environmental Science, with the approval of the Biology Department.

\*Students also need to apply to the Albright College Study Abroad / Study Off-Campus Center by the deadline prior to the semester they want to study at Duke.