**BioEco Planning Worksheet: B.S. Biological Sciences, Specialization**  
Revised 2012 (120 hours)

Student Name: _________________________________  Email: _________________________________  
Faculty Mentor/Home Dept.: _________________________________ Matriculation: ________________

**University Core Curriculum** (see Undergraduate Catalog for list of course options)

**Foundation Skills**
- Composition (6 hours)
  - ○ ____________________________
  - ○ ____________________________
- University College (3 hours)
  - ○ UCOL 101 Foundations of Inquiry

- Speech Communication (3 hours)
  - ○ SPCM 101 (3 hours)
- Mathematics (3 hours)
  - ○ MATH 108 and 109, or 111 or 141 or 151

**Disciplinary Studies**
- Fine Arts (3 hours)
  - ○ ____________________________
- Science (6 hours)
  - Group I
    - ○ CHEM 200 and 201
  - Group II
    - ○ BIOL 200A
- Human Health (2 hours)
  - ○ ____________________________

**Humanities (6 hours)**
- ○ ____________________________
- ○ ____________________________
- ○ ____________________________

**Social Science (6 hours)**
- ○ ____________________________
- ○ ____________________________

**Integrative Studies**
- Multicultural (3 hours)
  - ○ ____________________________

**College of Science Requirements** (6 hours)
- Biological Sciences: completed with the Biological Sciences major
- Mathematics: completed with the Biological Sciences major
- Physical Sciences: completed with the Biological Sciences major
- Supportive Skills: 6 hours chosen from the following
  - ○ CS 105 Introduction to Application Software, or CS 200B Computer Concepts, or CS 201 Problem Solving with Computers, or CS 202 Introduction to Computer Science
  - ○ ENGL 290 Intermediate Analytical Writing, or ENGL 291 Intermediate Technical Writing, or ENGL 391 Precision in Reading and Writing
  - ○ Two-semester sequence of a foreign language
### Requirements for the Biological Sciences Major (B.S., Ecology Track): 71-74 hours

#### Biology Core
- BIOL 200A Cell and Molecular Biology, Genetics and Evolution
- BIOL 200B Organismal and Ecological Biology
- BIOL 304 Evolution
- BIOL 305 Principles of Genetics or MICR 302 Molecular Biology
- BIOL 307 Principles of Ecology
- MICR 301 Principles of Microbiology
- PHSL 310 Principles of Physiology
- PLB 300 Diversity of Plants, Algae, and Fungi
- ZOOL 220 Animal Diversity
- ZOOL 470 Interdisciplinary Approaches to Environmental Issues

#### Life Science Electives: choose 7 hours from the following
- MICR 423 Geomicrobiology
- MICR 454 Soil Microbiology
- MICR 470 Prokaryotic Diversity Lecture
- MICR 477 Microbial Ecology
- PLB 410 Ecology of Bryophytes
- PLB 416 Limnology
- PLB 435 Plant-Insect Interactions
- PLB 439 Natural Areas/Rare Species
- PLB 440 Grassland Ecology
- PLB 443 Restoration Ecology
- PLB 444 Quantitative Plant Ecology
- PLB 445 Wetland Ecology and Management
- PLB 447 Field Studies in Latin America

#### Physical Sciences
- CHEM 200 Intro. to Chemical Principles
- CHEM 210 General and Inorganic Chemistry
- CHEM 339 Introduction to Organic Chemistry or CHEM 340 Organic Chemistry I
- CHEM 341 Organic Chemistry Laboratory I
- PHYS 203A College Physics and PHYS 253A College Physics Laboratory, or PHYS 205A University Physics and PHYS 255A University Physics Laboratory

#### Mathematics: choose one of the following options
- MATH 108 College Algebra and MATH 109 Trigonometry and Analytic Geometry
- MATH 111 Precalculus

#### Quantitative Skills: choose one of the following options; a statistics course is preferred
- MATH 141 Short Course in Calculus for Biological Sciences or MATH 150 Calculus I
- MATH 282 Introduction to Statistics or PLB/ZOOL 360 Introductory Biostatistics or EPSY 402 Basic Statistics

#### Ecology Electives: choose 5 hours from the following including at least one lab course
- ANTH 410K Ecological Anthropology
- FOR 331 Forest Ecosystems
- FOR 402 Highland Hydrology
- FOR 406 Landscape Ecology
- FOR 415 Urban Ecosystem Management
- FOR 451 Natural Resources Inventory
- FOR 452 Forest Soils
- FOR 454 Forest Ecology Field Studies
- GEOG 439 Global Climate Change
- GEOG 431 Climatology
- GEOL 425 Invert. Paleontology/Paleoecology (lab)
- GEOL 428 Paleoeology/Environ. Deposit. (lab)
- PLB/ZOOL 351 Ecological Methods (lab)
- PLSS 240 Soil Science (lab)
- PLSS 370 Agroecology/Sustainable Ag. Syst.
- PLSS 441 Soil Morphology and Classification

#### Undergraduate Research: choose 3 hours from the following
- PLB 493A Ecology
- ZOOL 393 Individual Research
- MICR 490 Undergraduate Research Participation
- ZOOL 493 Honors Research

### Electives (0-3 hours)
- ________________________________