BioEcol Planning Worksheet: B.S. Biological Sciences, Ecology Specialization
Revised for 2016-2017 (120 hours)

Student Name: ___________________________________  Email: ______________________________

Faculty Mentor/Home Dept.: __________________________ Matriculation: ________________

**University Core Curriculum** (see Undergraduate Catalog for list of course options): 39 hours

**Foundation Skills**
Composition (6 hours)
- ____________________________
- ____________________________

Speech Communication (3 hours)
- CMST 101 (3 hours)
- MATH 141

**Disciplinary Studies**
Fine Arts (3 hours)
- ____________________________

Human Health (2 hours)
- PHSL 310

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): 68 hours**

**Biology Core (30 hours)**
- BIOC 200A Cell and Molecular Biology, Genetics and Evolution [1(+3)]
- BIOC 200B Organismal and Ecological Biology [4]
- BIOC 304 Evolution [3]
- BIOC 305 Principles of Genetics [3]
- MICR 301 Principles of Microbiology [4]
- PHSL 310 Principles of Physiology [3(+2)]
- PLB 300 Diversity of Plants, Algae, and Fungi [4]
- ZOOL 220 Animal Diversity [5]

**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
- PHSL/ZOOL 433 Comparative Physiology
- PHSL/ZOOL 434 Environmental Physiology
- PLB 320 Elements of Plant Physiology
- PLB/ZOOL 351 Ecological Methods
- PLB 416/ZOOL 415 Limnology
- PLB/ZOOL 435 Plant-Insect Interactions
- PLB 440 Grassland Ecology
- PLB/ZOOL 443 Restoration Ecology
- PLB 444 Ecological Analysis of Communities
- PLB/ZOOL 445 Wetland Ecology and Management
- PLB 451 Flora of Southern Illinois
- PLB 452 Plant Population Ecology
- ZOOL 410 Conservation Biology
- ZOOL 411 Environmental Risk Assessment
- ZOOL 440 Wildlife Nutritional Ecology
- ZOOL 458 Multiple Stressors in Ecology
- ZOOL 468 Wildlife Biology Principles
- ZOOL 469 Wildlife Techniques
- ZOOL 471 Entomology
- ZOOL 490 Energetics, Food Webs, and Ecosystems

**Physical Science (19 hours)**
- CHEM 200 Introduction to Chemical Principles [1(+3)] and CHEM 201 General Chemistry Laboratory I [1]
- CHEM 210 General and Inorganic Chemistry [4] and CHEM 211 General Chemistry Laboratory II [1]
- CHEM 350 Introduction to Biological Chemistry [3]

**Mathematics: choose one of the following options [1(+3)]**
- MATH 141 Short Course in Calculus for Biological Sciences

**Statistics: choose one of the following options [3]**
- MATH 282 Intro. to Statistics or PLB/ZOOL 360 Introductory Biostatistics or QUAN 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 452 Forest Soils
- FOR 454A-D Forest Ecology Field Studies
- GEOG 439 Global Climate Change
- GEOL 425 Invert. Paleontology/Paleoecology (lab)
- GEOL 428 Paleocology/Environ. Deposit. (lab)
- CSEM 240 Soil Science (lab)
- CSEM 370 Agroecology/Sustainable Ag. Syst.
- CSEM 441 Soil Morphology and Classification

**Undergraduate Research: choose 3 hours from the following**
- MICR 490 Undergrad Research Participation
- PLB 492 Honors in Plant Biology
- PLB 493A Research Topics: Ecology
- ZOOL 491 Internship in Zoology
- ZOOL 492 Individual Research in Zoology
- ZOOL 493 Honors Research in Zoology
- ZOOL 496 Field Studies in Zoology
- ZOOL 497 Laboratory Studies in Zoology

**Electives (7 hours)**
- ____________________________________________
- ____________________________________________