

## **Major Requirements: Ecology A.B.**

### **UGA Core Classes**

#### **Preferred or Required Classes in Each Area**

##### **I. Foundation Courses (9 hours)**

ENGL 1101 – English Composition I  
ENGL 1102 – English Composition II  
MATH 1113 – Precalculus

##### **II. Sciences (7-8 hours)**

CHEM 1211, CHEM 1211L – Freshman Chemistry I and Lab  
BIOL 1107, BIOL 1107L – Principles of Biology I and Lab

##### **III. Quantitative Reasoning (3-4 hours)**

GEOG 2011-2100L Introduction to Geographic Information Science  
CSCI 1210 Computer Modeling and Science

##### **IV. World Languages and Culture, Humanities and the Arts (12 hours)**

Language courses (SPAN, FREN, PORT, etc) 1001 or 1110, 1002, 2001  
Humanities and the Arts, 3 hours

##### **V. Social Sciences (9 hours)**

POLS 1101  
HIST 2111 or 2112  
One elective

##### **VI. Major Related Courses (20 hours)**

BIOL 1108-1108L– Principles of Biology II and Lab  
ECOL 1000-1000L – Ecological Basis of Environmental Issues and Lab  
ECOL 2100 – Global Climate Change: Past, Present, and Future  
AAEC 2580 – Applied Microeconomics Principles or ECON 2106 – Principles of Microeconomics  
COMM 1100 – Introduction to Public Speaking  
ANTH 1102 – Introduction to Anthropology or GEOG 1103 – Cultural Geography of the United States

## **Major Requirements**

### **Required courses (20 hours)**

STAT 2000 Intro to Statistics  
ECOL 3400 Professional Development for Ecological Careers  
ECOL 3500-3500L or ECOL 3505-3505H Ecology  
ECOL 3530 Conservation Biology  
ECOL 3300 Applied Ecology Field Program  
ECOL 4900 Environmental Practicum  
ECOL 4950 Senior Seminar

**Organismal/ Natural History Requirement (3-4 hours): Choose 1**

ECOL 4050-4050L Ichthyology  
 ECOL 4070-4070L Invertebrate Biology and Ecology  
 ENTO 3140-3140L Insect Natural History  
 ENTO 4000-4000L General Entomology  
 PATH(PBIO) 4200-4200L Mycology

PBIO 4650- 4650L Plant Taxonomy  
 WILD 3580- 3580L Vertebrate Natural History  
 WILD 4040- 4040L Herpetology  
 WILD 4050- 4050L Ornithology  
 WILD 4050- 4050L Mammalogy

**Methods or Skills Requirement (3-4 hours): Choose 1**

CRSS(FANR) 3060-3060L Soils and Hydrology  
 ECOL 3510 Ecology Laboratory  
 ECOL 4940\*\* Internship  
 ECOL 4960 or 4960H\*\* Research  
 ECOL(MARS) 4225-4225L Methods in Marine Ecology

ECOL 4310-4310L Freshwater Ecosystems  
 FANR 3800,- 3800L Spatial Analysis of Natural Resources and Laboratory  
 GEOG 4370- 4370L Geographic Information Science  
 STAT 4210 Statistical Methods

**Major Electives (9-12 hours)****Choose 3 courses. At least one course must be from Group A:**Group A

ECOL 3000-3000L Introduction to Field Methods  
 ECOL 3100-3100L Tropical Field Ecology  
 ECOL 3220 Biology & Conservation of Marine Mammals  
 ECOL 3480 Special Topics in Ecology  
 ECOL 3510 Ecology Laboratory  
 ECOL 3520 Ecological Applications  
 ECOL 3600 Tropical Ecology: From Organisms to Ecosystems  
 ECOL 3880H Ecosystems of the World  
 ECOL 3900\* or ECOL 3900H\* Directed Reading  
 ECOL 4050-4050L Ichthyology  
 ECOL 4070-4070L Invertebrate Biology and Ecology  
 ECOL 4130L Ecological Methodology  
 ECOL(BIOL) 4150/4150L Population Biology of Infectious Disease

ECOL 4160 Ecology of North America  
 ECOL (FANR) 4220 Foundations of Restoration Ecology  
 ECOL(MARS) 4225-4225 Methods in Marine Ecology  
 ECOL 4240-4240L Physiological Ecology  
 ECOL(FISH)(WASR) 4310-4310L Freshwater Ecosystems  
 ECOL(BIOL)(MARS) 4330-4330L Tropical Marine Invertebrates  
 ECOL 4500 Evolutionary Ecology  
 ECOL(PBIO) 4520 Plant-Animal Interactions  
 ECOL 4540 Behavioral Ecology  
 ECOL 4940 \*\* Internship  
 ECOL 4960\*\* or ECOL 4960H\*\* Research  
 ECOL 4990\*\* or ECOL 4990H\*\* Senior Thesis

Group B:

AAEC 3020 Analysis of Agribusiness and Natural Resources Issues  
 AAEC 3400 Introduction to Agricultural Policy  
 ALDR(AFST)(LACS) 4710 International Agricultural Development  
 ANTH 3040 or 3045L Introduction to Biological Anthropology  
 ANTH 3090 Evolution of Human Ecosystems  
 ANTH 3100 Peoples of the World  
 ANTH 3200 How the World Works: Anthro. of Consumption & Globalization  
 ANTH 3235 Anthropology of Roots and Rooting  
 ANTH 3265 Introduction to Cultural Anthropology  
 ANTH 3541 Anthropology of Eating  
 ANTH 4010 Historical Ecology

ANTH 4015 Landscapes and Memories  
 ANTH 4070 Cultural Ecology  
 ANTH 4100 Evolution and Human Behavior  
 ANTH(BIOL)(ECOL)(EETH)(ENTO)(FANR)4261- Natural History Internship  
 ANTH 4290 Environmental Archaeology  
 ANTH(PBIO) 4300-4300L Ethnobotany  
 CMLT 3210 Ecocriticism  
 CMLT 4835 Environmental Literature  
 COMM 3200 Business and Professional Communication  
 COMM 3320 Environmental Communication  
 COMM 3600 Small Group Communication

CRSS(FANR) 3060-3060L Soils and Hydrology  
CRSS 3540 Soil Morphology and Interpretation  
CRSS 4010 Principles of Sustainable Management  
CRSS 4930 Agroecology of Tropical America  
CRSS 4931 Agroecology Tropical America Field Trip  
EETH 4020 Readings in Environmental Ethics  
EETH(AESC) 4190 Agricultural Ethics  
EETH 4230 Environmental Values and Policy  
EHSC 4400 Environmental Issues in the Developing World  
EHSC 4610 Water Pollution and Human Health  
EHSC 4700 Genetic Applications in Environmental Health Science  
EHSC 4900 Global Environmental and Public Health  
ENTO 4820-4820L Entomology in Natural Resources Management  
ENVM 3060 Principles of Resource Economics  
ENVM(EHSC) 4250 Environmental and Public Health Law  
ENVM4770H Business of Environmental Law  
ENVM(AAEC) 4930 Environmental Law and Governmental Regulation  
FANR 3800-3800L Spatial Analysis of Natural Resources & Laboratory  
FANR (ECOL) 4810 Natural Resources Law  
FISH(ECOL)(MARS)(WILD) 4550-4550L Conservation Aquaculture  
GENE 3000 Evolutionary Biology  
GEOG 3110 Climatology  
GEOG 3630 Introduction to Urban Geography  
GEOG 4160 Applied Climatology in the Urban Environment  
GEOG(PBIO) 4220 Ecological Biogeography

GEOG(PBIO) 4240 Plant Geography  
GEOG 4350-4350L Remote Sensing of the Environment  
GEOG 4370-4370L Geographic Information Science  
GEOG 4810 Conservation Ecology and Resource Management  
GEOL 3150 Coastal Processes and Conservation  
GEOL 4010-4010 Life and Ecologies of the Past  
GEOL 4520 Paleocology  
HORT 3125 Organic Agricultural Systems  
HORT 3125 Fertility and Pest Management in Organic Agriculture  
HORT(ANTH)(PBIO) 3440 Herbs, Spices, and Medicinal Plants  
IDIS(CBIO) 3100 People, Parasites, and Plagues  
INTL 4220 International Conflict  
INTL 3200 International Relations  
INTL 4210 International Law  
MARS 3450-3450L Marine Biology  
MARS(MIBO) 4620-4620L Microbial Ecology  
MARS 4810 Global Biogeochemical Cycles  
PBIO 3010 Fungi, Friends, and Foes  
PHIL(EETH) 4220 Environmental Ethics  
STAT 4210 Statistical Methods  
STAT 4220 Applied Experimental Methods  
STAT 4240 Sampling and Survey Methods  
WASR 4400 Introduction to Wetlands  
WASR(CRSS)(ECOL)(ENGR) 4700L Hydrology, Geology, and Soils of Georgia  
WILD(ECOL) 4575-4575 Conservation Medicine

\* Maximum of 3 credit hours of ECOL 3900 or ECOL 3900H may count towards Major Requirements.

\*\*Maximum of 1 credit hour of ECOL 3910 may count towards Major Requirements.

\*\*\* Maximum of 7 credit hours of ECOL 4940, (ECOL 4960 or ECOL 4960H), (ECOL 4990 or ECOL 4990H) in any combination may count towards Major Requirements.