

Major Requirements: Ecology B.S.

UGA Core Classes

Preferred or Required Classes in Each Area

I. Foundation Courses (9 hours)

ENGL 1101
ENGL 1102
MATH 1113 Pre-calculus

II. Sciences (7-8 hours)

CHEM 1211-1211L General Chemistry 1
BIOL 1107-1107L Principles of Biology 1

III. Quantitative Reasoning (3-4 hours)

MATH 2250 Calculus 1

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

Language courses (SPAN, FREN, PORT, etc) 1001 or 1110, 1002, 2001
One elective Humanities, Arts or Literature course

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 2
CHEM 1212-1212L General Chemistry 2
CHEM 2211-CHEM 2211L or CHEM 2311H-CHEM 2311L- Organic Chemistry 1
CHEM 2212-CHEM 2212L or CHEM 2312H-CHEM 2312L Organic Chemistry 2 or BCMB 3100 Biochemistry or MATH 2260 Calculus 2
PHYS 1111-1111L Physics 1- Mechanics

Major Requirements

Required courses (23-25 hours)

ECOL 3400 Professional Development for Careers in Ecology
ECOL 3500-3500L or ECOL 3505H-3505L Ecology
ECOL 4000- Population and Community Ecology or ECOL (BIOL) 4150-4150L Population Biology of Infectious Disease
ECOL 4010- Ecosystem Ecology or ECOL 4310-4310L Freshwater Ecosystems
ECOL 4240-4240L Physiological Ecology or ECOL 4540 Behavioral Ecology
ECOL 4500 Evolutionary Ecology or GENE 3000 Evolutionary Biology or GENE 3200 Genetics
ECOL 4950 Senior Seminar
STAT 2000 Introduction to Statistics or BIOS 2010 Elementary Biostatistics

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

ANTH(ECOL) 4210 Zooarchaeology
CBIO(PBIO) 4600-4600L Biology of Protists
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 4130L Ecological Methodology
ECOL(MARS) 4225-4225L Methods in Marine Ecology
ECOL 4310-4310L Freshwater Ecosystems

ECOL 4960 or 4960H*** Research
FANR 3800-3800L Spatial Analysis of Natural Resources and Laboratory
GEOG 4370-4370L Geographic Information Science
STAT 4210 Statistical Methods

Major Electives (13-18 hours)

ANTH 4070 Cultural Ecology
ANTH(ECOL) 4210-Zooarchaeology
ANTH(BIOL)(ECOL) 4260-4260L Natural History Collections Management
ANTH(BIOL)(ECOL)(EETH)(ENTO)(FANR)4261 Natural History Internship
ANTH(ECOL) 4290 Environmental Archaeology
ANTH(PBIO) 4300-4300L Ethnobotany
BCMB 3100 Biochemistry
BIOL(WILD) 3700 Animal Behavior
BIOL 3710L Animal Behavior Laboratory
BIOL 3720L Field Animal Behavior
CBIO(PBIO) 4600-4600L Biology of Protists
CRSS(FANR) 3060-3060L Soils and Hydrology
CRSS(HORT)(ECOL) 4590 Soil Fertility and Plant Nutrition
CRSS(MIBO) 4610-4610L Soil Microbiology
CRSS(HORT)(ANTH)(ECOL)(GEOG) 4930 Agroecology of Tropical America
CRSS(HORT)(ANTH)(ECOL)(GEOG) 4931 Agroecology Trop. Am. Field Trip
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 3530 Conservation Biology
ECOL 3880H Ecosystems of the World
ECOL 3900* or ECOL 3900H* Directed Reading
ECOL 3910** Undergraduate Ecology Seminar
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(MARS) 4225-4225L Methods in Marine Ecology
ECOL 4240-4240L Physiological Ecology
ECOL(FISH)(WASR) 4310-4310L Freshwater Ecology
ECOL(BIOL)(MARS) 4330-4330L Tropical Marine Invertebrates
ECOL 4500-Evolutionary Ecology
ECOL(PBIO) 4520 Plant- Animal Interactions
ECOL 4540 Behavioral Ecology
ECOL 4570 Comparative Biodiversity & Land Conservation
ECOL(PBIO) 4580- Foundations of Ecology
ECOL 4940 Internship
ECOL 4960*** or ECOL 4960H*** Research
ECOL 4990*** or ECOL 4990H*** Senior Thesis
ENTO 3140-3140L Insect Natural History
ENTO 4000-4000L General Entomology
ENTO 4820-4820L Entomology in Natural Resources Management
ENVM(ECOL)(FANR)(EHSC) 4770H Business of Environmental Law
FANR 3800-3800L Spatial Analysis of Natural Resources & Laboratory
FANR (ECOL) 4810 Natural Resources Law
FISH(ECOL)(MARS)(WILD) 4300-4300L Environmental Biology of Fishes
FISH 4360 Fish Ecology
FISH 4550-4550L Conservation Aquaculture
GENE 3000 Evolutionary Biology
GENE 3200 Genetics

GEOG 3110 Climatology
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 4010-4010L Life and Ecologies of the Past
GEOL 4520 Paleoecology
MARS 3450-3450L Marine Biology
MARS 4100 Physical Processes of the Ocean
MARS(FISH) 4380-4380L Marine Fisheries Biology
MARS(MIBO) 4620-4620L Microbial Ecology
MARS 4810 Global Biogeochemical Cycles
MATH 4780 Mathematical Biology
PATH(PBIO) 4200-4200L Mycology
PBIO 3010 Fungi, Friends, and Foes

PBIO 4270 Flowers
PBIO 4650-4650L Plant Taxonomy
PHYS 1112-1112L Physics 2
PHYS 1212-1212L Physics 2
STAT 4210 Statistical Methods
STAT 4220 Applied Experimental Methods
STAT 4240 Sampling and Survey Methods
STAT 4290 Nonparametric Methods
WASR(CRSS)(ECOL)(ENGR) 4700L Hydrology, Geology, and Soils of Georgia
WILD 4575-4575L Conservation Medicine
WILD 3580-3580L Vertebrate Natural History
WILD 4040-4040L Herpetology
WILD 4050-4050L Mammalogy
WILD 4060-4060L Ornithology

* 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.