

University of Georgia Athens, Georgia 30602 univcouncil@uga.edu www.uga.edu

University Council

January 13, 2023

# UNIVERSITY CURRICULUM COMMITTEE - 2022-2023

Susan Sanchez, Chair Agricultural and Environmental Sciences - Kylee Duberstein Arts and Sciences – Jonathan Haddad (Arts) Rodney Mauricio (Sciences) Business - Jim Carson Ecology - Amanda Rugenski Education - David Jackson Engineering - Kun Yao Environment and Design - Ashley Steffens Family and Consumer Sciences - Sheri Worthy Forestry and Natural Resources - Joseph Dahlen Journalism and Mass Communication - Dodie Cantrell-Bickley Law - Randy Beck Pharmacy - Michelle McElhannon Public and International Affairs - Rongbin Han Public Health - Pamela Orpinas Social Work - Harold Briggs Veterinary Medicine - Shannon Hostetter Graduate School - Christof Meile Ex-Officio - Provost S. Jack Hu Undergraduate Student Representative - Kate Lindgren Graduate Student Representative - Yehia Abdelsamad

Dear Colleagues:

The attached proposal from the Warnell School of Forestry and Natural Resources to offer a new Minor in Wildlife Sciences will be an agenda item for the January 20, 2023, Full University Curriculum Committee meeting.

Sincerely,

Susan Sanchez, Chair University Curriculum Committee

cc: Provost S. Jack Hu Dr. Marisa Pagnattaro

# PROPOSAL FOR MINOR PROGRAM OF STUDY

- 1. School/College: Warnell School of Forestry and Natural Resources
- 2. Department/Division: Warnell School of Forestry and Natural Resources
- 3. Minor Name: Wildlife Sciences
- 4. Proposed Effective Date: Fall 2023
- 5. Which campus(es) will offer this program? Athens

## 6. CIP: <u>03060101</u>

## 7. Program Description:

The Warnell School of Forestry and Natural Resources is a premier program for Wildlife Sciences. Wildlife are a public resource with ecological, cultural, and economic importance. Wildlife sciences integrate biology, ecology, animal behavior, animal population dynamics, habitat management, animal physiology and nutrition, conservation genetics, wildlife diseases and health, and social sciences to understand wild animal populations and diagnose, study, and develop solutions to manage the use of animal populations and prevent wild animal extinctions.

There are many allied fields for which a minor in wildlife sciences is highly complementary and likely desirable among undergraduates, including Animal Science, Anthropology, Avian Biology, Biology, Ecology, Forestry, Marine Science, Natural Resource Management and Sustainability, Neurobiology, Parks, Recreation, and Tourism Management. It is anticipated that pre-veterinary students will be interested in a minor in Wildlife Sciences, and the opportunity to focus on minor study in wildlife science and conservation, particularly human dimensions of wildlife conservation, is also likely to be attractive to some students majoring in public policy and administration and international affairs.

An attractive aspect of Warnell wildlife courses is that they are often field oriented, creating unique experiences for many students, and Warnell hosts a broad range of study abroad courses in South Africa, New Zealand, Australia, Fiji, and Costa Rica focusing on general ecology, wildlife sciences, animal behavior, natural resources management, and sustaining human societies and natural environments.

### 8. Program of Study/Requirements:

The Wildlife minor consists of a minimum of 15 semester hours of coursework. At least 9 of the 15 hours must be upper division coursework. The proposed curriculum includes 6-7 hours of required courses and 8-9 hours of electives.

# **Required Courses (6-7 hours)**

• WILD 1100E, Wildlife in America (2 hours) or

WILD(FISH) 3000W, Introduction to Fish and Wildlife Management (2 hours)

- WILD(FISH) 3001, Fish and Wildlife Policy (1 hour)
- [WILD 4110/6110, Wildlife Science: Design, Sampling, Analyses, and Inferences for Fish and Wildlife Populations, and WILD 4110L/6110L, Wildlife Science Lab] (4 hours)

or

WILD 4650/6650-4650L/6640L, Wildlife Techniques Field Camp (4 hours) *or* 

[WILD 4700/6700, Techniques in Wildlife Population Management, and WILD 4700L/6700L, Techniques in Wildlife Population Management Laboratory] (3 hours)

# **Elective Courses (8-9 hours)**

Choose one of the following Wildlife Natural History and Sciences courses:

- ECOL 3220, Biology and Conservation of Marine Mammals (3 hours)
- WILD(ECOL) 3580, Vertebrate Natural History (3 hours) and WILD(ECOL) 3580L, Vertebrate Natural History Laboratory (1 hour)
- WILD(ECOL) 4040/6040-4040L/6040L, Herpetology (4 hours)
- WILD(ECOL) 4050/6050, Mammalogy (3 hours) and WILD(ECOL) 4050L/6050L, Mammalogy Laboratory (1 hour)
- WILD(ECOL) 4060/6060-4060L/6060L, Ornithology (4 hours)

Choose one of the following Human Dimensions and Decision-Making in Natural Resources courses:

- ANTH(ECOL)(FANR)(SOCI) 4846, Environmental Governance (3 hours)
- ECOL 3300, Field Program in Ecological Problem-Solving (4 hours)
- ECOL 4080/6080, Principles of Integrative Conservation and Sustainability (4 hours)
- ECOL 4570/6570, Comparative Biodiversity and Land Conservation Policy: Costa Rica and the United States (4 hours)
- FANR 3400-3400D, Society and Natural Resources (2 hours)
- FANR 4271W/6271W, People, Planet, and Profit (variable 1-9 hours)
- FANR(WILD) 4820/6820, Human Dimensions of Natural Resources and Wildlife Conservation (3 hours)
- JURI(FANR)(ECOL) 4810/6810, Natural Resources Law (3 hours)
- WILD 4500/6500, Nongame and Endangered Species Management (3 hours)
- WILD 4900/6900, Wildlife Damage Management (2 hours) and WILD 4900L/6900L, Wildlife Damage Management Lab (1 hour)

Select the remainder of elective courses from the following General Wildlife Sciences courses or the other Elective categories above:

- ANTH(PSYC)(ECOL)(WILD) 4744/6744, Primate Behavior (3 hours)
- ANTH(ECOL)(WILD) 4746/6746, Primate Conservation (3 hours)
- CBIO 3000-3000L, Comparative Vertebrate Anatomy (4 hours)
- ECOL 3100-3100L, Tropical Field Ecology (4 hours)
- ECOL 3500, Ecology (3 hours), and ECOL 3500L, Ecology Laboratory (1 hour)
- ECOL 3520, Applied Field Ecology (4 hours)

- ECOL 3530, Conservation Biology (3 hours)
- ECOL 3600, Tropical Ecology: From Organisms to Ecosystems (3 hours)
- ECOL 3770S, Urban Ecology (3 hours)
- ECOL 3880H, Ecosystems of the World (Honors) (3 hours)
- ECOL 4120H, Ecology of Global Change (Honors) (2 hours)
- ECOL 4160-4160L, Ecology of North America (4 hours)
- ECOL(FANR) 4220/6220, Foundations of Restoration Ecology (3 hours)
- ECOL 4450/6450-4450L/6450L, Spatial Ecology (3 hours)
- ECOL 4500/6500, Evolutionary Ecology(4 hours)
- ECOL 4540/6540, Behavioral Ecology (3 hours)
- ECOL 4640/6640, Cognitive Ecology (3 hours)
- ECOL 4775/6745-4775L/6745L, Ecological Developmental Biology and Ecotoxicology (4 hours)
- FANR(ECOL)(GEOG) 1200, Natural History of Georgia (3 hours)
- FANR 2010-2010L, Introduction to Natural Resource Statistics (4 hours)
- FANR 3200W, Ecology of Natural Resources (3 hours) and FANR 3200L, Ecology of Natural Resources Laboratory (1 hour)
- FANR 3800, Spatial Analysis of Natural Resources (2 hours) and FANR 3800L, Spatial Analysis of Natural Resources Laboratory (1 hour)
- FANR 4350/6350, Conservation Genetics (3 hours)
- FANR 4960R, Faculty-Mentored Undergraduate Research in Natural Resources I (variable 1-6 hours)
- FANR 5600/7600, Landscape Genetics (2 hours)
- FISH 4200/6200, Aquatic Biology (3 hours)
- FISH(ECOL)(MARS)(WILD) 4300/6300, Environment Biology of Fishes (3 hours), and FISH(ECOL)(MARS)(WILD) 4300L/6300L, Environment Biology of Fishes Laboratory (1 hour)
- FISH(ECOL)(MARS)(WILD) 4550/6550-4550L/6550L, Sustainable Aquaculture (4 hours)
- GENE 3200-3200D, Genetics (4 hours)
- MARS 1020, Biology of the Marine Environment (3 hours) and MARS 1020L, Introduction to Marine Biology Lab (1 hour)
- MARS 1030, Migrations in the Sea (3 hours)
- MARS 3100, Oceans in Peril (3 hours)
- MARS 3200, Fundamentals of Ocean science (3 hours)
- MARS 4400/6400, Introduction to Marine Policy (3 hours)
- MARS 3450, Marine Biology (3 hours)
- MARS 3550, Life in Fluids (3 hours)
- MARS(PBIO) 4160-4160L, Life and Death in the Salt Marsh (4 hours)
- MARS 4740L/6740L, Scientific Diving I (2 hours)
- PBIO(ECOL) 4520/6520, Plant-Animal Interactions (3 hours)
- POUL 3050, Molecular Diagnostic and Research Tools in Avian Biology (3 hours)
- POUL 3123, Avian Biology: Ecology, Physiology, and Behavior (3 hours)
- POUL(BIOL) 4060/6060, Reproductive Endocrinology (3 hours)
- POUL 4200/6200/4200L/6200L, Avian Anatomy and Physiology (4 hours)
- VPHY 3100, Elements of Physiology (3 hours)

- WASR4400-4400L, Introduction to Wetlands (3 hours)
- WILD 4100-4100L, Principles of Wildlife Habitat and Management (3 hours)
- WILD 4280/6280, Field Study in Natural History (3 hours)
- WILD 4400/6400, Wildlife Physiology and Nutrition (3 hours)
- WILD(ECOL)(POPH) 4575/6575, Conservation Medicine (6 hours)
- WILD(POPH) 5100/7100, Principles and Management of Wildlife Diseases (3 hours)
- WILD 5200/7200, International Issues in Wildlife Conservation (2-6 hours)
- WILD 5350/7350, Wetland Management for Wildlife (2 hours), and WILD 5350L/7350L, Wetland Management for Wildlife Laboratory (1 hour)
- WILD 5700/7700, Applied Population Dynamics (2 hours), and WILD 5700L/7700L, Applied Population Dynamics Lab (1 hour)

# 9. Approvals:

Associate Dean for Academic Affairs

Warnell School

Dean

School/College

Date

12/19/2022

Date

12/20/2022

# **Documentation of Approval and Notification**

Proposal: Minor in Wildlife Sciences

**College:** Warnell School of Forestry and Natural Resources

Department: Warnell School of Forestry and Natural Resources

Proposed Effective Term: Fall 2023

#### School/College:

- Warnell School of Forestry and Natural Resources Associate Dean, Dr. Robert Bringolf, 12/19/22
- Warnell School of Forestry and Natural Resources Dean, Dr. Dale Greene, 12/20/22

#### Notification/Use of Courses:

- Cellular Biology Department Head, Dr. Dennis Kyle, 1/6/23
- Genetics Department Head, Dr. Michael Arnold, 1/6/23
- Marine Sciences Department Head, Dr. Daniela Di Iorio, 1/6/23
- Odum School of Ecology Associate Dean, Dr. Pejman Rohani, 1/6/23
- Poultry Science Department Head, Dr. Todd Applegate, 1/6/23