

Warnell School of Forestry and Natural Resources

Professional Program Curriculum

Fisheries and Wildlife Major Program of Study

Course ID	Course Title	Hours
FANR 3000-3000L ¹	Field Orientation, Measurements, and Sampling in Forestry and Natural Resources	4
FANR 3200W-3200L or ECOL(BIOL) 3500-3500L ²	Ecology of Natural Resources Ecology	4 4
FANR 3800-3800L	Spatial Analysis of Natural Resources	3
FANR 4500S or FANR 4990R ^{3 4}	Senior Project or Senior Thesis	4
WILD (FISH) 3000W or WILD 1100E	Introduction to Fish and Wildlife Management or Wildlife in America	2
WILD (FISH) 3001	Fish & Wildlife Policy	1
WILD (ECOL) 3580-3580L	Vertebrate Natural History	4
Economics Requirement ⁵		
Area of Emphasis and Restricted Electives (choose Aquatic Sciences, Pre-Vet Wildlife Sciences, or Wildlife Sciences) ^{6 7}		38
Professional Hours		60
Total with Regents Core		120

¹ FANR 3000-3000L must be taken in the first term that a student is in the professional program (official major).

² Students wishing to complete the ecology minor should take ECOL 3500-3500L.

³ Students must apply to take Senior Thesis in the term prior to their graduation term. Students who elect to take FANR 4990R Senior Thesis must complete at least 4 hours from a combination of up to 3 hours of faculty directed research (FANR 4960R, 4970R, or 4980R) and at least one hour of thesis (FANR 4990R). Students taking Senior Thesis must also take FISH(WILD) 4520-4520L.

⁴ Both Senior Project and Senior Thesis fulfill UGA's Experiential Learning requirement. Other approved courses and co-curricular activities are available at <http://bulletin.uga.edu/elcourses.aspx>

⁵ Students completing the fisheries & wildlife major must also complete an economics requirement as part of the Core Curriculum or as a major elective. The following courses will satisfy this requirement: ECON 2100, 2100E, 2105, 2105E, 2105H, 2106, 2106E, 2106H, 2200, 2200E, 2200H, or FANR 3300-3300D. The course used to satisfy this requirement can be used towards other requirements as well.

⁶ See the following pages for the requirements for each area of emphasis.

⁷ A maximum of 3 hours of internship (COFA 3900, FISH 3900, FORS 3900, GISC 3900, PRTM 3900, WASR 3900, and WILD 3900) may be used towards graduation with this major. Students must apply for internship credit before starting work.

Professional Program Curriculum (continued)

Fisheries and Wildlife Major Areas of Emphasis

Aquatic Sciences Area of Emphasis		
Course ID	Course Title	Hours
Required Courses:		20
CRSS (FANR) 3060-3060L	Soils and Hydrology	4
FISH 4200-4200L	Aquatic Biology	4
FISH 4300-4300L	Environmental Biology of Fishes	4
FISH 4500-4500L	Fish Physiology	4
FISH 5360-5360L	Fisheries Management	4
Wildlife Sciences Requirement	Students must take one course from the Wildlife Sciences list below.	
Restricted Electives: choose from the categories below		18*
Policy, Law, and Decision-Making Elective (3-5 hours required)		
<i>If FANR 4500S is taken, must take 3 hours from:</i>		
ENVM 4930	Environmental Law and Governmental Regulation	3
FANR 3400-3400D	Society and Natural Resources	2
FANR 4020	Sustainable Development	3
FANR 4271	Field Studies in Natural Resources	3-6
FANR 4800W	Renewable Resources Policy	2
FANR 4810	Natural Resources Law for Managers and Administrators	3
WILD 4500	Nongame and Endangered Species Management	3
WILD 4520-4520L	Conservation Decision-Making	3
<i>If FANR 4990R is taken, must take 5 hours:</i>		
WILD 4520-4520L	Conservation Decision-Making	3
...and 2 hours from the FANR 4500S list above.		2
Aquatic Sciences Electives (4 hours required)		
FISH 3000+	any FISH 3000-level or above course	various
or	other advisor-approved course	various
Open Major Electives (9-11 hours required)		
<i>If FANR 4500S is taken, must take 11 hours from this list</i>		
<i>If FANR 4990R is taken, must take 9 hours from this list</i>		
BIOL 3700W	Animal Behavior	3
CHEM 2212 & 2212L	Modern Organic Chemistry II	4
COFA 3000+	any COFA 3000-level or above course	various
ECOL 3220	Biology and Conservation of Marine Mammals	3-4
ECOL 4010	Ecosystem Ecology	3
ECOL 4050-4050L	Ichthyology	4
ECOL 4240-4240L	Physiological Ecology	4
ENTO 4000-4000L	General Entomology	4
FANR 3000+	any FANR 3000-level or above course	various
FISH 3000+	any FISH 3000-level or above course	various
FORS 3000+	any FORS 3000-level or above course	various
GENE 3000	Evolutionary Biology	4
GISC 3000+	any GISC 3000-level or above course	various
PHYS 1112-1112L	Introductory Physics – Electricity & Magnetism, Optics, Modern Physics	4
PRTM 3000+	any PRTM 3000-level or above course	various
WASR 3000+	any WASR 3000-level or above course	various
WILD 3000+	any WILD 3000-level or above course	various
Wildlife Sciences Requirement (1 class required, but it can be a class used as an elective above)		
<i>Choose from:</i>		
ECOL 3220, WILD 4040-4040L, 4050, 4060-4060L, 4100-4100L, 4500, 4575, 4900, 5100, 5200, or 5350-5350L		

* Total hours for Area of Emphasis and Restricted Electives must equal 38.

Effective for students entering Fall 2020 and later.

Professional Program Curriculum (continued)

Fisheries and Wildlife Major Areas of Emphasis

Wildlife Sciences Area of Emphasis		
Course ID	Course Title	Hours
Required Courses:		13
CRSS (FANR) 3060-3060L	Soils and Hydrology	4
FORS 3010-3010L	Dendrology	3
WILD 4100-4100L	Principles of Habitat Management for Wildlife	3
WILD 4700-4700L	Techniques in Wildlife Population Management	3
Restricted Electives: choose from the categories below		25*
Organismal Biology and Ecology: Wildlife Biology Elective (select one course; 4 hours required)		
WILD 4040-4040L	Herpetology	4
WILD 4050-4050L	Mammalogy	4
WILD 4060-4060L	Ornithology	4
Organismal Biology and Ecology: Zoology Elective (select one course; 3 hours required)		
BIOL 3700W	Animal Behavior	3
ECOL 3220	Biology and Conservation of Marine Mammals	3-4
ECOL 4050-4050L	Ichthyology	4
ECOL 4240-4240L	Physiological Ecology	4
ENTO 4000-4000L	Entomology	4
FANR 4350	Conservation Genetics	3
FISH 4300-4300L	Environmental Biology of Fishes	4
FISH 4650L	Georgia Fishes Field Study	4
WILD 4040-4040L	Herpetology	4
WILD 4050-4050L	Mammalogy	4
WILD 4060-4060L	Ornithology	4
WILD 4400	Wildlife Physiology and Nutrition	3
WILD 4575	Conservation Medicine & Biology	6
	<i>Students taking WILD 4575 may use 3 hours towards this and 3 hours towards Open Major Electives.</i>	
WILD 5100	Principles and Management of Wildlife Diseases	3
WILD 5200	International Wildlife Management in South Africa	6
	<i>Students taking WILD 5200 may use 3 hours towards this elective and 3 hours towards Open Major Electives</i>	
Population Ecology, Conservation, and Management (select one course; 3 hours required)		
ECOL 4000	Population and Community Ecology	3
WILD 5700-5700L	Applied Population Dynamics	3
Policy, Law, and Decision-Making Elective (3-5 hours required)		
<i>If FANR 4500S is taken, must take 3 hours from:</i>		
ENVM 4930	Environmental Law and Governmental Regulation	3
FANR 3400-3400D	Society and Natural Resources	2
FANR 4020	Sustainable Development	3
FANR 4271	Field Studies in Natural Resources	3-6
FANR 4800W	Renewable Resources Policy	2
FANR 4810	Natural Resources Law for Managers and Administrators	3
WILD 4500	Nongame and Endangered Species Management	3
WILD 4520-4520L	Conservation Decision-Making	3
<i>If FANR 4990R is taken, must take 5 hours:</i>		
WILD 4520-4520L	Conservation Decision-Making	3
	<i>...and 2 hours from the FANR 4500S list above.</i>	2

(requirements continued on the following page)

Effective for students entering Fall 2020 and later.

Open Major Electives (10-12 hours required)

If FANR 4500S is taken, must take 12 hours from this list

If FANR 4990R is taken, must take 10 hours from this list

BIOL 3700W	Animal Behavior	3
CHEM 2212 & 2212L	Modern Organic Chemistry II	4
COFA 3000+	any COFA 3000-level or above course	various
ECOL 3220	Biology and Conservation of Marine Mammals	3-4
ECOL 4010	Ecosystem Ecology	3
ECOL 4240-4240L	Physiological Ecology	4
ENTO 4000-4000L	General Entomology	4
FANR 3000+	any FANR 3000-level or above course	various
FISH 3000+	any FISH 3000-level or above course	various
FORS 3000+	any FORS 3000-level or above course	various
GENE 3000	Evolutionary Biology	4
GISC 3000+	any GISC 3000-level or above course	various
PHYS 1112-1112L	Introductory Physics – Electricity & Magnetism, Optics, Modern Physics	4
PRTM 3000+	any PRTM 3000-level or above course	various
WASR 3000+	any WASR 3000-level or above course	various
WILD 3000+	any WILD 3000-level or above course	various

Professional Program Curriculum (continued)

Fisheries and Wildlife Major Areas of Emphasis

Pre-Vet / Wildlife Sciences Area of Emphasis		
Course ID	Course Title	Hours
Required Courses:		16
BCMB 3100	Biochemistry	4
FORS 3010-3010L	Dendrology	3
WILD 4100-4100L	Principles of Habitat Management for Wildlife	3
WILD 4700-4700L	Techniques in Wildlife Population Management	3
WILD 5100	Wildlife Disease Ecology and Management	3
Restricted Electives: choose from the categories below		22*
Organismal Biology and Ecology: Wildlife Biology Elective (select one course; 4 hours required)		
WILD 4040-4040L	Herpetology	4
WILD 4050-4050L	Mammalogy	4
WILD 4060-4060L	Ornithology	4
Organismal Biology and Ecology: Zoology Elective (select one course; 3 hours required)		
BIOL 3700W	Animal Behavior	3
ECOL 3220	Biology and Conservation of Marine Mammals	3-4
ECOL 4050-4050L	Ichthyology	4
ECOL 4240-4240L	Physiological Ecology	4
ENTO 4000-4000L	Entomology	4
FANR 4350	Conservation Genetics	3
FISH 4300-4300L	Environmental Biology of Fishes	4
FISH 4650L	Georgia Fishes Field Study	4
WILD 4040-4040L	Herpetology	4
WILD 4050-4050L	Mammalogy	4
WILD 4060-4060L	Ornithology	4
WILD 4400	Wildlife Physiology and Nutrition	3
WILD 4575	Conservation Medicine & Biology <i>Students taking WILD 4575 may use 3 hours towards this and 3 hours towards Open Major Electives.</i>	6
WILD 5100	Principles and Management of Wildlife Diseases	3
WILD 5200	International Wildlife Management in South Africa <i>Students taking WILD 5200 may use 3 hours towards this elective and 3 hours towards Open Major Electives</i>	6
Policy, Law, and Decision-Making Elective (3-5 hours required)		
<i>If FANR 4500S is taken, must take 3 hours from:</i>		
ENVM 4930	Environmental Law and Governmental Regulation	3
FANR 3400-3400D	Society and Natural Resources	2
FANR 4020	Sustainable Development	3
FANR 4271	Field Studies in Natural Resources	3-6
FANR 4800W	Renewable Resources Policy	2
FANR 4810	Natural Resources Law for Managers and Administrators	3
WILD 4500	Nongame and Endangered Species Management	3
WILD 4520-4520L	Conservation Decision-Making	3
<i>If FANR 4990R is taken, must take 5 hours:</i>		
WILD 4520-4520L	Conservation Decision-Making	3
<i>...and 2 hours from the FANR 4500S list above.</i>		2

(requirements continued on the following page)

Effective for students entering Fall 2020 and later.

Population Ecology, Conservation, and Management (select one course; 3 hours required)

ECOL 4000	Population and Community Ecology	3
WILD 5700-5700L	Applied Population Dynamics	3

Open Major Electives (7-9 hours required)

If FANR 4500S is taken, must take 9 hours from this list

If FANR 4990R is taken, must take 7 hours from this list

BIOL 3700W	Animal Behavior	3
CHEM 2212 & 2212L	Modern Organic Chemistry II	4
COFA 3000+	any COFA 3000-level or above course	various
ECOL 3220	Biology and Conservation of Marine Mammals	3-4
ECOL 4010	Ecosystem Ecology	3
ECOL 4240-4240L	Physiological Ecology	4
ENTO 4000-4000L	General Entomology	4
FANR 3000+	any FANR 3000-level or above course	various
FISH 3000+	any FISH 3000-level or above course	various
FORS 3000+	any FORS 3000-level or above course	various
GENE 3000	Evolutionary Biology	4
GISC 3000+	any GISC 3000-level or above course	various
PHYS 1112-1112L	Introductory Physics – Electricity & Magnetism, Optics, Modern Physics	4
PRTM 3000+	any PRTM 3000-level or above course	various
WASR 3000+	any WASR 3000-level or above course	various
WILD 3000+	any WILD 3000-level or above course	various

Advanced Biology Courses

The UGA Vet School required eight (8) hours of “advanced biology” courses. The following courses in the pre-vet wildlife sciences requirement will also count towards this requirement. These courses can be used towards both the advanced biology coursework requirement and the requirements for the pre-vet wildlife sciences area of emphasis.

ECOL 3220	Biology and Conservation of Marine Mammals	3-4
ECOL 4050-4050L	Ichthyology	4
FANR 4350	Conservation Genetics	3
FISH(WILD) 4300-4300L	Environmental Biology of Fishes	4
GENE 3000	Evolutionary Biology	4
WILD 4040-4040L	Herpetology	4
WILD 4050-4050L	Mammalogy	4
WILD 4060-4060L	Ornithology	4
WILD 4400	Wildlife Physiology and Nutrition	3
WILD 4575	Conservation Medicine & Biology	6
WILD 5100	Principles and Management of Wildlife Diseases	3