

**The University of Tennessee at Martin**  
**Bachelor of Science in Natural Resources Management (with a major in NRM)**  
**Wildlife and Fisheries Biology Concentration**  
**Wildlife Science Option (program 1156)**

### **Overview**

Humanity is dependent upon coexistence with a multitude of wildlife species in balanced ecosystems. Trained wildlife professionals are able to apply scientific principles and techniques to modify environmental conditions to favor fish and wildlife. They must not only understand the needs of fish and wildlife, but how to provide those needs, in harmony with man's other land management activities, such as forestry, agriculture and industrial development. They must be able to resolve human and wildlife conflicts to the benefit of both and to the detriment of neither. The wildlife and fisheries biology curriculum provides a broad general education with a strong background in life sciences. The wildlife science option qualifies graduates for certification as Associate Wildlife Biologists by The Wildlife Society, the international scientific organization of the wildlife profession.

### **Career Opportunities**

Agencies of various levels of government have historically been major employers of wildlife professionals. This continues to be true, but an increasing number of wildlife professionals are employed by private and corporate firms as concerns about the environmental impact of industrial activities increases. Graduates of the UT Martin wildlife and fisheries biology curriculum are eligible for entry-level employment as conservation officers, research technicians, refuge managers, wildlife damage control technicians and environmental impact consultants. Graduates are also well prepared to pursue advanced degrees.

### **Facilities**

Classes and laboratory exercises are conducted in modern and comfortable facilities using modern instructional equipment. Many courses take frequent field trips to privately owned areas, state and federal wildlife refuges and management areas, and state and national parks. Upper division wildlife courses emphasize field participation with professional biologists of state and federal agencies to help students get experience and increase knowledge about practical management techniques. Numerous computer facilities are available for student use. An active UT Martin student chapter of The Wildlife Society (the national professional organization) provides a multitude of opportunities for students to gain hands-on wildlife experience. Students also have the opportunity to attend the annual meeting of the Southeastern Association of Fish and Wildlife Agencies.

Dr. Wes Totten, Chair  
Department of Agriculture, Geosciences, and Natural Resources  
257 Brehm Hall  
Martin, TN 38238  
Phone: 731-881-7262  
Email: wtotten@utm.edu

# B.S. in Natural Resources Management - Wildlife & Fisheries Biology Concentration - Wildlife Science Option (1156)

## Course Requirements for 2020-2021 catalog

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### Fine Arts (3 hours) *Select One*

ART 110	Understanding Visual Arts	___/3
ARTH 210	The History of Art	___/3
ARTH 211	The History of Art	___/3
DANC 110	Understanding Dance	___/3
MUS 111	Masterpieces of Music	___/3
MUS 112	Music in Our Time	___/3
MUS 113	Western Masterpieces	___/3
MUS 114	Historical Survey of Jazz	___/3
MUS 115	Music for the Masses	___/3
THEA 110	Understanding Theatre	___/3
THEA 111	Understanding Theatre	___/3

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### Biological & Physical Systems (16 hours)

BIOL 130	Foundations: Ecology, Evolution, & Diversity	___/4
BIOL 140	Foundations: Cell & Molecular	___/4
CHEM 111	Intro to Chemistry I: General & Inorganic	___/4
or 121	General Chemistry	___/4
CHEM 112	Intro to Chemistry II: Organic & Biochem	___/4
or 122	General Chemistry	___/4

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### Communications (9-10 hours)

ENGL 105	English Composition	___/3
or ENGL 111	English Composition	___/3
ENGL 112	English Composition	___/3
or ENGL 113	English for Technical Writers	___/3
COMM 230	Public Speaking	___/3
or COMM 229	Public Communication Online	___/3
or HONR 110	Public Speaking & Rhetorical Tradition	___/3

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### Humanities (9 hours) *Select Three*

ENGL 250-British Literature; ENGL 251-British Literature;		
ENGL 260-American Literature; ENGL 261-American Literature;		
ENGL 270-World Literature; ENGL 271-World Literature;		
FRAN 250-France Today; GERM 250-Germany Today;		
HIST 121-World Civilization I; HIST 122-World Civilization II;		
HIST 201-History of U.S. I; HIST 202-History of US II;		
HONR 101-Great Works I-The Ancient World & Classical Antiquity;		
HONR 102-Late Antiquity to the Middle Ages; HONR 201-Late		
Middle Ages to Renaissance; JAPN 250-Japan Today; PHIL 110-		
Adventure of Ideas: Historical; PHIL 120 Adventure of Ideas:		
Contemporary; PHIL 130-Ethics & Race; PHIL 160-Exploring Ethics;		
RLST 201-Intro Religious Studies; SPAN 250-Latin America Today		
_____	___/3	
_____	___/3	
_____	___/3	

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### Mathematics (6 hours)

MATH 160	Calculus for Business & Life Sciences	___/3
MATH 210	Elementary Statistics & Probability	___/3

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### Social & Behavioral Sciences (6 hours) *Select Two*

AGRI 295-Intn'l Food & Fiber; ANSC 270-Animal Welfare & Ethics;		
ECON 201-Macroeconomics; ECON 202-Microeconomics;		
ENGR 100-Society & Tech; GEOG 151-Intro Regional Geography;		
GEOG 152-Intro Regional Geography; GEOG 202-Intro Cultural;		
HLTH 111-Personal Health; HONR 202-Great Works IV-The		
Enlightenment to Modernity; NRM 101-Wildlife, Conservation		
and Environmental Issues; NRM 250-Global Perspectives in Natural		
Resources; NUTR 100-Intro Nutrition; POSC 210-American Govt &		
Politics; POSC 220-American Political Institutions & Policy;		
POSC 230-Intro World Politics; PSYC 101-Intro Psychology;		
SWRK 220-Understanding Human Diversity; SOC 201-General		
Sociology; SOC 202-Social Problems; SUST 200-Intro to Sustainability;		
WMST 201-Intro to Women's & Gender Studies		
_____	___/3	
_____	___/3	

### Natural Resources Management Common Core (22 hours)

AGET 220	Surveying & Soil and Water Engineering	___/3
AGRI 270	Intro to Geospatial Technology	___/3
or GEOG 270	Intro to Geospatial Technology	___/3
NRM 100	Intro to Natural Resources Management	___/3
NRM 210	Human Dimensions in Natural Resources Mgmt	___/3
SOIL 210	Soil Science	___/4
PLSC 341	Dendrology & Forest Ecology	___/3
Aquatic Science Elective (3 hours) <i>Select One</i>		
NRM 225	Introduction to Aquatic Science	___/3
NRM 315	Restoration of Freshwater Habitats	___/3
SOIL 315	Soil & Water Conservation	___/3
SOIL 430	Wetland Science	___/3

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### Wildlife & Fisheries Biology Concentration (25 hours)

ANSC 360	Animal Genetics	___/3
or BIOL 336	Introductory Genetics	___/3
BIOL 331	General Ecology	___/3
or ZOOL 441	Animal Ecology	___/3
NRM 330	Natural Resources Research	___/3
NRM 390	Career Planning in NRM	___/1
WBIO 240	Fish & Wildlife Management Techniques	___/3
WBIO 250	Principles of Wildlife Management	___/3
WBIO 330	Wildlife Biopolitics	___/3
WBIO 450	Wildlife Habitat Management	___/3
Communications Elective (3 hours) <i>Select One</i>		
COMM 200	Intro: Media Writing	___/3
COMM 311	Interpersonal Communications	___/3
COMM 356	Comm in Professional Environment	___/3
ENGL 325	Technical Communications	___/3

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### Wildlife Science Option (24 hours)

BOT 303	Plant Taxonomy	___/3
<u>Botany Elective (3 hours) <i>Select One</i></u>		
BOT 301	Foundations of Botany	___/3
BOT 302	Plant Morphology	___/3
BOT 305	Freshwater Algae	___/3
BOT 306	Aquatic & Wetland Plants	___/3
BOT 421	Plant Physiology	___/3
BOT 431	Plant Ecology	___/3

### General Science Elective (3 hours) *Select One*

BIOL 391	Evolutionary Biology	___/3
BIOL 418	Limnology	___/3
BIOL 444	Conservation Biology	___/3
NRM 480	Applications of Molecular Biotechnology	___/3
PLSC 410	Silviculture	___/3
ZOOL 325	General Entomology	___/3
ZOOL 326	Aquatic Macroinvertebrates	___/3
ZOOL 440	General Parasitology	___/3
ZOOL 443	Animal Behavior	___/3

### General Wildlife Electives (6 hours) *Select Two*

WBIO 300	Principles of Fisheries Management	___/3
WBIO 311	Game Ecology & Management	___/3
WBIO 312	North American Game Management	___/3
WBIO 340	Wildlife Law Enforcement & Public Relations	___/3
WBIO 420	Wildlife Damage Management	___/3
WBIO 441	Forensic Techniques in Wildlife Biology	___/3

### Zoology Electives (9 hours) *Select Three*

ZOOL 319	Mammalogy	___/3
ZOOL 320	Ichthyology	___/3
ZOOL 321	Ornithology	___/3
or ZOOL 323	Field Ornithology	___/3
ZOOL 322	Herpetology	___/3
or ZOOL 327	Field Herpetology	___/3

**B.S. in Natural Resources Management  
Wildlife and Fisheries Biology - Wildlife Science  
2020-2021**

<b>Freshman Fall</b>	
BIOL 130	4
CHEM 111 or 121	4
ENGL 105 or 111	3
NRM 100	3
Humanities Elective	3
<b>Semester Total</b>	<b>17</b>

<b>Freshman Spring</b>	
BIOL 140	4
CHEM 112 or 122	4
ENGL 112 or 113	3
MATH 160	3
Social Science Elective	3
<b>Semester Total</b>	<b>17</b>

<b>Sophomore Fall</b>	
AGET 220	3
COMM 230	3
MATH 210	3
NRM 210	3
WBIO 240	3
<b>Semester Total</b>	<b>15</b>

<b>Sophomore Spring</b>	
AGRI or GEOG 270	3
SOIL 210	4
WBIO 250	3
Social Science Elective	3
Humanities Elective	3
<b>Semester Total</b>	<b>16</b>

<b>Junior Fall</b>	
PLSC 341	3
NRM 330	3
NRM 390	1
ZOOL 319 and/or 320	3
Botany Elective	3
<b>Semester Total</b>	<b>13</b>

<b>Junior Spring</b>	
ANSC 360 or BIOL 336	3
BIOL 331 or ZOOL 441	3
BOT 303	3
WBIO 330	3
ZOOL 321 and/or 322	3
<b>Semester Total</b>	<b>15</b>

<b>Senior Fall</b>	
Communications Elective	3
General Science Elective	3
Humanities Elective	3
Wildlife Elective	3
Wildlife Elective	3
<b>Semester Total</b>	<b>15</b>

<b>Senior Spring</b>	
WBIO 450	3
ZOOL 321 or 322	3
Aquatic Science Elective	3
Fine Arts Elective	3
<b>Semester Total</b>	<b>12</b>