

The University of Tennessee at Martin
Bachelor of Science in Natural Resources Management (with a major in NRM)
Wildlife and Fisheries Biology Concentration
Fisheries Science Option (program 1155)

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 fisheries science option qualifies graduates for certification as Associate Fisheries Professionals by The American Fisheries Society, the international scientific organization of the fisheries profession.

Career Opportunities

Agencies of various levels of government have historically been major employers of fisheries professionals. This continues to be true, but an increasing number of 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 field experience. Students also have the opportunity to attend the annual meeting of the Southeastern Association of Fish and Wildlife Agencies, as well as other related conferences.

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B.S. in Natural Resources Management - Wildlife & Fisheries Biology Concentration - Fisheries Science Option (1155)

Course Requirements for 2020-2021 catalog

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

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

Communication (9 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

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

Mathematics (6 hours)

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

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

AGRI 295-Intro'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 Mgmt	___/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	Intro: Aquatic Science	___/3
NRM 315	Restoration of Freshwater Habitats	___/3
SOIL 315	Soil & Water Conservation	___/3
SOIL 430	Wetland Science	___/3

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
Communication (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

Fisheries Science Option (24 hours)

BIOL 418	Limnology	___/3
or WBIO 405	Principles of Aquaculture	___/3
GEOG 315	Principles of Oceanography	___/3
WBIO 300	Principles of Fisheries Management	___/3
ZOOL 320	Ichthyology	___/3
Botany Elective (3 hours) <i>Select One</i>		
BOT 303	Plant Taxonomy	___/3
BOT 305	Freshwater Algae	___/3
BOT 306	Aquatic & Wetland Plants	___/3
BOT 431	Plant Ecology	___/3
General Science Elective (3 hours) <i>Select One</i>		
BIOL 391	Evolutionary Biology	___/3
BIOL 444	Conservation Biology	___/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 Elective (3 hours) <i>Select One</i>		
ZOOL 319	Mammalogy	___/3
ZOOL 321	Ornithology	___/3
ZOOL 322	Herpetology	___/3
ZOOL 323	Field Ornithology	___/3
ZOOL 325	General Entomology	___/3
ZOOL 326	Aquatic Macroinvertebrates	___/3
ZOOL 327	Field Herpetology	___/3
ZOOL 443	Animal Behavior	___/3
General Elective (3 hours)		___/3

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

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

Sophomore Fall	
AGET 220	3
COMM 230	3
MATH 210	3
NRM 210	3
WBIO 240	3
Semester Total	15

Sophomore Spring	
AGRI or GEOG 270	3
SOIL 210	4
WBIO 250	3
Aquatic Science Elective	3
Humanities Elective	3
Semester Total	16

Junior Fall	
GEOL 315	3
NRM 330	3
NRM 390	1
PLSC 341	3
ZOOL 320	3
Botany Elective	3
Semester Total	16

Junior Spring	
ANSC 360 or BIOL 336	3
BIOL 331 or ZOOL 441	3
WBIO 300	3
WBIO 330	3
Zoology Elective	3
Semester Total	15

Senior Fall	
BIOL 418 or WBIO 405	3
Communications Elective	3
General Science Elective	3
Humanities Elective	3
Semester Total	12

Senior Spring	
WBIO 450	3
Fine Arts Elective	3
General Elective	3
Social Science Elective	3
Semester Total	12