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.

Dr. Wes Totten, Chair
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Martin, TN 38238
Phone: 731-881-7262
Email: wtotten@utm.edu
## B.S. in NRM- Wildlife & Fisheries Biology Concentration—Fisheries Science Option (1155)
### Course Requirements for 2018-2019

**Fine Arts (3 hours) Select One**
- ART 110 Understanding Visual Arts ___/3
- ARTH 210 The History of Art ___/3
- ART 211 The History of Art ___/3
- DAN 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 Biology ___/4
- CHEM 111 Intro to Chemistry I: General & Inorganic Chemistry ___/4
  or 121 General Chemistry ___/4
- CHEM 112 Intro to Chemistry II: Organic & Biochemistry ___/4
  or 122 General Chemistry ___/4

**Communication (9 hours)**
- ENGL 110 English Composition (Must earn a C or better) ___/3
- ENGL 112 English Composition (Must earn a C or better) ___/3
- COMM 230 Public Speaking ___/3

**Humanities (9 hours) Select Three**
- ENGL 250 British Literature ___/3
- ENGL 251 British Literature ___/3
- ENGL 260 American Literature ___/3
- ENGL 261 American Literature ___/3
- ENGL 270 World Literature ___/3
- ENGL 271 World Literature ___/3
- FREN 250 France Today ___/3
- GERM 250 Germany Today ___/3
- HIST 121 World Civilization I ___/3
- HIST 122 World Civilization II ___/3
- HIST 201 History of the U.S. I ___/3
- HIST 202 History of the U.S. II ___/3
- JAPN 250 Japan Today ___/3
- PHIL 110 Adventure of Ideas: Historical ___/3
- PHIL 120 Adventure of Ideas: Contemporary ___/3
- PHIL 130 Ethics and Race ___/3
- PHIL 160 Exploring Ethics ___/3
- SPAN 250 Latin America Today ___/3
- RLST 201 Intro Religion Studies ___/3

**Mathematics (6 hours)**
- MATH 210 Elementary Statistics & Probability ___/3
- MATH 160 Calculus for Business & Life Sciences ___/3

**Social & Behavioral Sciences (6 hours) Select Two**
- AGRI 295 International Food & Fiber Systems ___/3
- ANSC 270 Animal Welfare & Ethics ___/3
- ECON 100 American Enterprise System ___/3
- ECON 201 Principles of Macroeconomics ___/3
- ECON 202 Principles of Microeconomics ___/3
- ENGR 100 Society & Technology ___/3
- GEOG 151 Intro Regional Geo: NA, Europe, Russia ___/3
- GEOG 152 Intro Regional Geo: Asia, Africa, LA ___/3
- GEOG 202 Intro to Cultural Geography ___/3
- HLTH 111 Principles & Concepts in Personal Health ___/3
- IDST 201 Intro to Women’s Studies ___/3
- NRM 101 Wildlife, Conservation & Environmental Issues ___/3
- NRM 250 Global Perspectives in Natural Resources ___/3
- NUTR 100 Introductory Nutrition ___/3
- POSC 210 American Government & Politics ___/3
- POSC 220 American Political Institutions & Policy ___/3
- POSC 230 Introduction to World Politics ___/3
- PSYC 101 Introduction to Psychology ___/3
- SWRK 220 Understanding Human Diversity ___/3
- SOC 201 General Sociology ___/3
- SOC 202 Social Problems ___/3

**Natural Resources Management Core (19 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
- WATER (3 hours) Select One
  - 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 Core (25 hours)**
- ANSC 360 Animal Genetics ___/3
  or BIOL 336 Introductory Genetics ___/3
- NRM 430 Natural Resources Research ___/3
- NRM 390 Career Planning in NRM ___/3
- 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
- BIOL 331 General Ecology ___/3
  or ZOOL 441 Animal Ecology ___/3
- Communications (3 hours) Select One
  - COMM 200 Intro: Media Writing ___/3
  - or COMM 311 Interpersonal Communications ___/3
  - or COMM 356 Comm in Professional Environment ___/3
  - or ENGL 325 Technical Communications ___/3

**Fisheries Science Option (24 hours)**
- BIOL 418 Limnology ___/3
  or WBIO 405 Principles of Aquaculture ___/3
- WBIO 300 Principles of Fisheries Management ___/3
- ZOOL 320 Ichthyology ___/3
- GEOL 315 Principles of Oceanography ___/3
  or 445 Geohydrology ___/3
- BOTANY (3 hours) Select One
  - BOT 303 Plant Taxonomy ___/3
  - BOT 305 Freshwater Algae ___/3
  - BOT 306 Aquatic & Wetland Plants ___/3
  - BOT 431 Plant Ecology ___/3
- Science (3 hours) Select One
  - 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 (3 hours) Select One
  - ZOOL 319 Mammalogy ___/3
  - ZOOL 321 Ornithology ___/3
  - ZOOL 322 Herpetology ___/3

*Students who place in ENGL 100, will use ENGL 110 instead of ENGL 111 in the ENGL sequence*

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*Continued on back*
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

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Fisheries Science Electives (3 hours)
*Choose three hours of general elective credits

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