# Bachelor of Science in Wildlife and Fisheries Science

## Wildlife and Fisheries Management Concentration – 2020-21 Catalog

Department of Forestry, Wildlife and Fisheries  
University of Tennessee, Knoxville

### Fall Semester  
Year 1  
- (3) BIOL 150 - Organismal/Ecological Biology  
- (3) ENGL 101 - English Composition I  
- (1) WFS 100 - Introduction to Wildlife & Fisheries  
- (3) Cultures & Civilizations Elective\(^b\)  
- (3) Arts & Humanities Elective\(^b\)  
  
### Spring Semester  
- (2) BIOL 159 – Skills of Biological Investigations  
- (3) BIOL 160 - Cellular and Molecular Biology  
- (3) MATH 125 - Basic Calculus  
- (3) ENGL 102 - English Composition II  
- (3) FWF 250 - Conservation  

### Fall Semester  
Year 2  
- (4) ESS 210 - Introduction to Soil Science  
- (3) FWF 212 - Dendrology & Silvics of North Amer. Trees  
- (3) GIS Elective\(^c\)  
- (4) CHEM 120 - General Chemistry  
- (3) Technical Writing Elective\(^d\)  
  
### Spring Semester  
- (2-3) BIOL 260 - Ecology OR FORS 215 - Forest Ecology  
- (3) MATH 115 - Stat Reason OR STAT 201 Intro Stats  
- (3) Communications Elective\(^e\)  
- (3) Social Science Elective\(^b\)  
- (4) Economics Elective\(^f\)  

### Fall Semester  
Year 3  
- (4) EEB 474 - Ichthyology (or TN Fishes- Summer)  
- (3) FWF 315 - Principles of Wildlife & Fisheries Mgmt.  
- (3) Anatomy and Physiology Elective\(^g\)  
- (3) Aquatic Elective\(^h\)  
- (3) Plant Elective\(^i\)  
  
### Spring Semester  
- (1) FWF 310 - Wildland Fire Behavior & Mgt  
- (3) FWF 312 - Principles of Silviculture\(^b\)  
- (3) FWF 313 - Measurements and Sampling  
- (3) WFS 444 - Ecology & Mgmt. Wild Mammals OR  
  WFS 445 - Ecology & Mgmt. Birds  
- (3) Wildlife Ecology and Management Elective\(^j\)  
- (3) Cultures & Civilizations Elective\(^b\)  

### Fall Block  
Year 4  
- (2) WFS 305 - Prescribed Fire Management  
- (2) WFS 324 - Wildlife Habitat Evaluation  
- (2) WFS 340 - Wetlands Ecology & Management  
- (1) WFS 350 - Wildlife Damage Management  
- (2) WFS 440 - Wildlife Techniques  
- (3) WFS 442 - Fisheries Techniques  
- (2) FWF 415 - Upland Habitat Management  
  
### Spring Semester  
- (3) FWF 416 - Plan & Mgt FWF Resources  
- (3) Human Dimensions Elective\(^k\)  
- (2-4) Science Elective\(^l\)  
- (3) Arts and Humanities Elective\(^b\)  
- (3) WFS 443 - Fisheries Science OR  
  WFS 452 - Ecology and Management of Fishes  
- (1) WFS 461 - Professional Development in WFS  

\(^a\) 120 hours required for graduation; courses listed by department, number and title are required.  
\(^b\) General Education electives - choose from the University General Education list. Students must complete one course from the Social Sciences list, two courses from the Arts and Humanities list, and two courses from the Cultures and Civilizations list. FWF 312 meets the Communication through Writing (WC) requirement.  
\(^c\) GIS elective - choose from FWF 430, ESS 326, GEOG 311, GEOG 413.  
\(^d\) Technical Writing Elective - choose from ENG 295, ENGL 360, JREM 450, JREM 451.  
\(^e\) Communications elective - choose from ALEC 240, CMST 210, CMST 217, CMST 240, CMST 247.  
\(^f\) Economics elective - choose from AREC 201, ECON 201, ECON 207, ECON 211, ECON 213.  
\(^g\) Anatomy and Physiology elective - choose from AS 220, BCMB 230, EEB 353, WFS 431, WFS 450.  
\(^h\) Aquatic elective - choose from EEB 470, ESS 424, GEOG 436, GEOG 453, GEOG 456, GEOG 459, GEOG 485, WFS 420, WFS 441.  
\(^i\) Plant elective - choose from EEB 330, EEB 414, EEB 424, EEB 426, EEB 433, FWF 325S, PLSC 421.  
\(^j\) Wildlife Ecology and Management electives - choose one not used to meet other requirements WFS 433, WFS 434, WFS 444, WFS 445.  
\(^k\) Human Dimensions elective - choose from FORS 422, FWF 320, FWF 420, SOCI 360, SOCI 465.  
\(^l\) Any 300-level or above course in WFS, FWF, FORS, EEB, EPP, ANSC, MICR, or BCMB.
Elective Choices:

GIS Elective:
- ESS 326 GIS/GPS Applications in Agriculture and Environmental Science
- FWF 430 Introduction to Geographic Information Systems (GIS) for Natural Resources
- GEOG 311 Geovisualization and Geographic Information Science
- GEOG 413 Remote Sensing of the Environment

Technical Writing Elective:
- ENG 295 Business and Technical Writing
- ENGL 360 Technical and Professional Writing
- JREM 450 Writing about Science and Medicine
- JREM 451 Environmental Writing

Communications elective:
- ALEC 240 Presentation and Sales Strategies for Agricultural Audiences
- CMST 210 Public Speaking
- CMST 217 Honors: Public Speaking
- CMST 240 Business and Professional Communication
- CMST 247 Honors: Business and Professional Communication

Economics Elective:
- AREC 201 Econ Global Food/Fiber System
- ECON 201 Introductory Economics: A Survey Course
- ECON 207 Honors: Introductory Economics
- ECON 211 Principles of Microeconomics
- ECON 213 Principles of Macroeconomics

Anatomy and Physiology Elective:
- ANSC 220 Animal Anatomy and Physiology
- BCMB 230 Human Physiology
- EEB 353 Comparative Vertebrate Biology
- WFS 431 Wildlife Physiology and Nutrition
- WFS 450 Fish Physiology

Aquatic Elective:
- EEB 470 Aquatic Ecology
- ESS 424 Environmental Stormwater Management
- ESS 462 Environmental Climatology
- GEOG 436 Water Resources
- GEOG 453 Extreme Weather Climatology
- GEOL 456 Global Climate Change
- GEOL 459 Introduction to Oceanography
- GEOL 485 Principles of Hydrogeology
- WFS 420 Identification and Ecology of Freshwater Mussels
- WFS 441 Stream Ecology

Plant Elective:
- EEB 330 Field Botany
- EEB 414 Plant Anatomy
- EEB 424 Plant Diversity and Evolution
- EEB 426 Plant Animal Interactions
- EEB 433 Plant Ecology
- FWF 325S Wildlife Vegetation and Habitat
- PLSC 421 Native Plants in the Landscape

Wildlife Ecology and Management Elective:
- WFS 433 Amphibian Ecology and Conservation
- WFS 434 Ecology and Conservation of Tropical Mammals
- WFS 444 Ecology and Management of Wild Mammals
- WFS 445 Ecology and Management of Wild Birds

Human Dimensions Elective:
- FORS 422 Forest and Wildland Resource Policy
- FWF 320 Human Dimensions of Natural Resources
- FWF 420 International Natural Resource Issues
- SOCI 360 Environment and Resources
- SOCI 465 Social Values and the Environment