# Bachelor of Science in Wildlife and Fisheries Science
## Wildlife Health Concentration – 2020-21 Catalog
Department of Forestry, Wildlife and Fisheries  
University of Tennessee, Knoxville

### Student Advisor

#### Fall Semester  
1. **Year 1**
   - (3) BIOL 150 - Organismal/Ecological Biology  
   - OR BIOL 158 - Honors  
   - (3) MATH 125 - Basic Calculus  
   - (3) ENGL 101 - English Composition I OR ENGL 118 - Honors  
   - (1) WFS 101 - Current Topics in Wildlife Health  
   - (1) WFS 100 - Intro to Wildlife & Fisheries Science  
   - (3) Arts & Humanities Elective\(^b\)  

   **14**

#### Spring Semester  
1. **Year 1**
   - (2) BIOL 159 – Skills of Biological Investigations  
   - (3) BIOL 160 - Cellular and Molecular Biology  
   - (4) CHEM 120 - General Chemistry OR CHEM 128 - Honors  
   - (3) ENGL 102 - English Composition II  
   - (3) WFS 250 - Conservation  

   **15**

#### Fall Semester  
1. **Year 2**
   - (3) ANSC 220 - Animal Anatomy and Physiology  
   - (4) CHEM 130 - General Chemistry II OR CHEM 138 - Honors  
   - (3) FWF 315 - Principles of Wildlife & Fisheries Management  
   - (3) Arts and Humanities Elective\(^b\)  
   - (3) Social Science Elective\(^b\)  

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#### Spring Semester  
1. **Year 2**
   - (2) BIOL 260 - Ecology  
   - (2) BIOL 269 - Ecology Field-Based Laboratory  
   - (3) CHEM 260 - Foundations of Organic Chemistry  
   - (1) CHEM 269 - Foundations of Organic Chem Lab  
   - (3) MATH 115 - Stat Reason OR STAT 201 Intro Stats  
   - (3) CHEM 359 - In-depth Organic Chemistry Lab  

   **14-15**

#### Fall Semester  
1. **Year 3**
   - (3) CHEM 360 - In-depth Organic Chemistry  
   - (1) CHEM 359 - In-depth Organic Chemistry Lab  
   - (4) PHYS 221 - Elements of Physics  
   - (3) Communications Elective\(^c\)  
   - (4) Science Electives\(^g\)  

   **15**

#### Spring Semester  
1. **Year 3**
   - (4) PHYS 222 - Elements of Physics  
   - (3) Wildlife Ecology and Management Elective\(^e\)  
   - (3) Cultures & Civilizations Elective\(^b\)  
   - (3-4) Economics Elective\(^h\)  

   **13-14**

#### Fall Semester  
1. **Year 4**
   - (4) BCMB 401 - Biochemistry I  
   - (2) BIOL 220 - General Microbiology  
   - (2) BIOL 229 - General Microbiology Laboratory  
   - (3) WFS 431 - Wildlife Physiology and Nutrition  
   - (3) Physiology Elective\(^f\)  
   - (3) WFS 433, WFS 434, WFS 443, WFS 444, WFS 445  

   **17-19**

#### Spring Semester  
1. **Year 4**
   - (3) BCMB 311 - Advanced Cellular Biology  
   - (3) WFS 401 - Ecology & Mgt of Wildlife Health  
   - (6) Wildlife Ecology and Management Electives\(^d\)  
   - (3) Technical Elective\(^d\)  

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\(^a\) 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. One of these courses must also be a Communicating through Writing (WC) course.  
\(^c\) Communications elective - choose from ALEC 240; ANSC 360; CMST 210, CMST 217, CMST 240, CMST 247.  
\(^d\) Technical elective – choose from ANSC 280, ANSC 320, ANSC 330, ANSC 380, ANSC 489; ESS 326; EPP 525; FWF 430; GEOG 311, GEOG 413.  
\(^e\) Wildlife Ecology and Management elective - choose from WFS 433, WFS 434, WFS 443, WFS 444, WFS 445.  
\(^f\) Physiology elective – choose from BCMB 230, BCMB 440; WFS 450.  
\(^g\) Science elective - any 300-level and above course(s) not already required for the major in WFS, FORS, FWF, EPP, ANSC, EEB, MICR, or BCMB.  
\(^h\) Economics elective - choose from AREC 201; ECON 201, ECON 207, ECON 211, ECON 213.
Elective Choices:

Communications elective –
- ALEC 240 Presentation and Sales Strategies for Agricultural Audiences
- ANSC 360 Equine and Food Animal Evaluation
- CMST 210 Public Speaking
- CMST 217 Honors: Public Speaking
- CMST 240 Business and Professional Communication
- CMST 247 Honors: Business and Professional Communication

Technical elective –
- ANSC 280 Livestock Management and Well-being
- ANSC 320 Reproductive Physiology and Lactation
- ANSC 330 Comparative Animal Nutrition
- ANSC 380 Animal Health Management
- ANSC 489 Companion and Exotic Animal Management
- ESS 326 GIS/GPS Applications in Agriculture and Environmental Science
- EPP 525 Medical and Veterinary Entomology
- 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

Wildlife Ecology and Management electives –
- WFS 433 Amphibian Ecology and Conservation
- WFS 434 Ecology and Conservation of Tropical Mammals
- WFS 443 Fisheries Science
- WFS 444 Ecology and Management of Wild Mammals
- WFS 445 Ecology and Management of Wild Birds

Physiology elective –
- BCMB 230 Human Physiology
- BCMB 440 General Physiology
- WFS 450 Fish Physiology

Economics elective –
- AREC 201 Economics of the Global Food and Fiber System
- ECON 201 Introductory Economics: A Survey Course
- ECON 207 Honors: Introductory Economics
- ECON 211 Principles of Microeconomics
- ECON 213 Principles of Macroeconomics