



University of Idaho

Department of Fish  
and Wildlife Sciences

# Fishery Sciences

Recommended 4-Year Plan | 2024/2025

## Training the Next Generation of Fisheries Professionals

The Bachelor of Science in Fisheries Sciences focuses on the ecology, conservation, and management of fish species and aquatic ecosystems. In this degree offered through the Department of Fish and Wildlife Sciences, our students learn to apply the principles of biology and ecology to understand how fish populations interact with each other and with their environment and how to address management challenges associated with a growing human population. Our degree emphasizes critical thinking through coursework and hands-on field and laboratory experiences, and our graduates are equipped to be successful natural resource managers, conservation officers and scientists in a rapidly changing world. Our graduates pursue careers with state, federal, tribal and private organizations involved with: managing recreationally and commercially important fish populations, conservation law enforcement, biological monitoring, environmental impact assessment, conservation of endangered fish and ecosystems, aquaculture and hatchery operation, control and prevention of fish diseases, and management of stream or lake ecosystems.

### FRESHMAN

FALL

COURSE	CREDITS
NR 101-Exploring Natural Resources	2
COMM 101-Fundamentals of Oral Communication	3
ENGL 101*-Writing & Rhetoric I <small>(sufficient test score)</small>	Writ Comm 3
MATH 143-College Algebra <small>(MATH 108)</small>	Math 3
BIOL 114-Organisms & Environments	Science 4

**TOTAL 15**

SPRING

COURSE	CREDITS
FISH/WLF 102-The Fish & Wildlife Professions	1
CHEM 101/101L-Intro to Chemistry & Lab <b>OR</b> CHEM 111/111L-Principles of Chemistry & Lab <small>(CHEM 101, MATH 143, 160, or 170, sufficient test score)</small>	Science 4
ENGL 102*-Writing & Rhetoric II <small>(ENGL 101)</small>	Writ Comm 3
Emphasis Area Requirement or Physical Science Requirement <small>(if emphasis area B or C)</small>	3
Emphasis Area Requirement	3

**TOTAL 14**

### SOPHOMORE

FALL

COURSE	CREDITS
WLF 201-Fish & Wildlife Applications I <small>(NR 101)</small>	2
WLF 220 <b>OR</b> FOR 221-Principles of Ecology <b>OR</b> NR 321-Ecology <small>(BIOL 102/102L, 114, 115, or PLSC 205) (Spring Only)</small>	3
FOR 235-Society & Natural Resources	Social Sci 3
BIOL 115/115L-Cells & the Evolution of Life & Lab <small>(CHEM 101 or 111)</small>	4
Emphasis Area Requirement	3

**TOTAL 15**

SPRING

COURSE	CREDITS
BIOL 213-Structure and Function Across the Tree of Life <small>(BIOL 115)</small>	4
WLF 370-Management & Communication of Scientific Data	3
STAT 251*-Statistical Methods <small>(MATH 108, 143, 160, or 170; or sufficient score)</small>	3
Emphasis Area Requirement or Physical Science Requirement <small>(if emphasis area A)</small>	3
Emphasis Area Requirement	3

**TOTAL 16**

# FISHERY SCIENCES

## Recommended 4-Year Plan | 2024/2025

### JUNIOR

#### FALL

COURSE	CREDITS
FISH 314-Fish Ecology (FOR/REM 221 or BIOL 314)	3
FISH 315-Fish Ecology Field Techniques & Methods	2
FISH/WLF 398-Renewable Natural Resources Internship <b>OR</b> FISH 498-Internship	1
Except Option C, See Emphasis Requirement	
Humanistic & Artistic Ways of Knowing Course	3
Except Option A, See Emphasis Requirement	
Emphasis Area Course	
Emphasis Area Course	

**TOTAL 15-16**

#### SPRING

COURSE	CREDITS
FISH/WLF 398-Renewable Natural Resources Internship <b>OR</b> FISH 498 Internship	1
FISH 481-Ichthyology (BIOL 114, 115 & 213)	3
Emphasis Area Requirement	3
International Course	4
Elective Course	
See Emphasis Requirements for Option A	

**TOTAL 13-16**

#### INTERNSHIP

#### CREDITS

FISH/WLF 398-Renewable Natural Resources Internship (Fall, Spring, or Summer)

2

### SENIOR

#### FALL

COURSE	CREDITS
FISH 415*-Limnology (STAT 251 & FOR/REM 221 or BIOL 314)	4
FISH 418-Fisheries Management (FISH 314, 481, & STAT 251)	4
FOR 375-Intro to Spatial Analysis for NR Mgmt (College algebra) <b>OR</b> GEOG 385-Foundations of GIS	3
Humanistic & Artistic Ways of Knowing	3
Except Option A, See Emphasis Requirement	

**TOTAL 14**

#### SPRING

COURSE	CREDITS
FISH 495-Seminar (sr. standing)	1
WLF 448-Fish and Wildlife Population Ecology (STAT 251 & MATH 160 or 170)	4
Emphasis Area Requirement	3
Emphasis Area Requirement	3
Emphasis Area Requirement	3

**TOTAL 13-14**

## EMPHASIS AREAS:

#### A. CONSERVATION LAW ENFORCEMENT

CRIM 101-Introduction to Criminology  
PHIL 103-Introduction to Ethics  
PSYC 101-Introduction to Psychology  
SOC 101-Introduction to Sociology  
WLF 205-Wildlife Law Enforcement  
**Select one of the following:**  
MATH 143 or MATH 160 or MATH 170  
**Select one of the following:**  
BIOL 250 or BIOL 310 or GENE 314  
**Select two (minimum of 6 credits) of the following:**  
FISH 411 or FISH 422 or FISH 424 or FISH 430 or FISH 450 or FISH 451 or WLF 314 or WLF 315 or WLF 411 or WLF 440  
**Select one of the following:**  
COMM 233 or COMM 335 or COMM 410 or NRS 387 or NRS 311 or NRS 364 or NRS 383 or NRS 462  
**Select one of the following:**  
CRIM 301 or CRIM 339 or CRIM 334 or CRIM 415 or CRIM 439 or PSYC 319 or PSYC 320 or SOC 201 or SOC 230 or SOC 343 or SOC 420

#### B. FISHERIES SCIENCE & MANAGEMENT

BIOL 250/255-General Microbiology & Lab  
BIOL 310 or GENE 314  
FISH 411-Fish Physiology  
FISH 422 or FISH 424  
MATH 160 or MATH 170  
**Select one of the following: (minimum of 3 credits) of the following**  
FISH 430 or FISH 450 or FISH 451 or FISH 497 or FISH 499  
**Select one of the following:**  
COMM 410 or FOR/NRS 484 or NRS 386 or NRS 387 or NRS 311 or NRS 364 or NRS 462 or NRS 383 or NRS 488 or WLF 205 or WLF 440

#### C. AQUACULTURE & HATCHERY MANAGEMENT EMPHASIS

FISH 411-Fish Physiology  
FISH 422-Concepts in Aquaculture  
FISH 424-Fish Health Management  
**Select one of the following:**  
ECON 201 or ECON 202 or ECON 272 or NRS 383  
**Select two (minimum of 6 credits) of the following:**  
BIOL 250 or BIOL 310 or GENE 314 or AVS 305 or FISH 497 or FISH 499  
**Select two (minimum of 6 credits) of the following:**  
AGEC 278 or ASM 107 or BUS 190 or COMM 410 or ENTR 414 or MKTG 321 or NRS 311 or NRS 386 or NRS 387 or NRS 462 or NRS 488

#### PHYSICAL SCIENCE

GEOG 100/100L-Introduction to Planet Earth OR  
GEOL 101/101L-Physical Geology OR  
PHYS 100/100L-Fundamentals of Physics OR  
PHYS 111/111L-General Physics I OR  
SOIL 205-The Soil Ecosystem  
SOIL 206-The Soil Ecosystem Lab

#### Ready to Get Started?

Email [cnradvising@uidaho.edu](mailto:cnradvising@uidaho.edu)



Students pursuing a B.S. Degree in Fisheries Science must have recieved a grade of 'C' or better in the following four indicator courses to register for FISH or WLF upper-division courses and to graduate with a B.S. : BIOL 213, WLF 220 or FOR 221, OR NR 321, and STAT 251.

To graduate, students must achieve a grade of 'C' or better in each FISH or WLF upper-division course listed in the requirements for the B.S. degree.

- This academic plan is intended as a guideline only and does not replace academic advising.
- 120 credits minimum are required for a B.S. in Fishery Sciences.
- Minimum of 36 upper-division credits required to graduate.
- See course catalog and department website for complete degree requirements and additional information.
- \*-Both Online & In-Person options are offered
- + -Offered only Online