Imagine a career managing fish populations, setting angler regulations or conducting research on ocean fishes! You can realize your career goals through our fisheries ecology and management option.

Make an appointment with one of our faculty advisers to learn more about our fisheries and wildlife major.

Contact Information
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snr.unl.edu

College of Agricultural Sciences and Natural Resources
(http://casnr.unl.edu)

Career Path
Fisheries Biologist, Research Biologist, Reservoir Manager

Special Emphasis Courses
Wildlife Ecology and Management, Fisheries Science, Limnology, Ichthyology, Reservoir Management, Freshwater Algae, Aquatic Insects, Conservation Biology

Internships Available
Our students have enjoyed internships with the Nebraska Game and Parks Commission, the U.S. Fish and Wildlife Service, Wyoming Game and Fish, Omaha’s Henry Doorly Zoo and other state and federal agencies.
## Fisheries and Wildlife Major Requirements

**FISHERIES ECOLOGY AND MANAGEMENT OPTION**

**2015-2016 Required Courses**

UNL College of Agricultural Sciences and Natural Resources

### Fisheries Ecology and Management Option Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRES 386 Vertebrate Zoology</td>
<td>4</td>
</tr>
<tr>
<td>Animal Course: NRES 489 Ichthyology</td>
<td>4</td>
</tr>
<tr>
<td>Plant Course: Select one course from: NRES 310 Intro to Forest Management, NRES 424 Forest Ecology, NRES 426 Invasive Plants</td>
<td>3-4</td>
</tr>
<tr>
<td>NRES 281 Intro to Water Science</td>
<td>3</td>
</tr>
<tr>
<td>NRES 208 Applied Climate Sciences or METR 100 or Climates and Weather and Climate</td>
<td>3</td>
</tr>
<tr>
<td>NRES 459 Limnology</td>
<td>4</td>
</tr>
<tr>
<td>Aquatic Ecology Course: Select one course from: NRES 402/402L Aquatic Insects, NRES 468 Wetlands, NRES 470 Lake &amp; Reservoir Management, or NRES 481 River &amp; Stream Ecology</td>
<td>3-4</td>
</tr>
<tr>
<td>GIS Course: Select one course from: NRES 312 Introduction to Geospatial Information Sciences, NRES 412 Introduction to Geographic Information Systems, NRES 418 Introduction to Remote Sensing, NRES 427 Introduction to Global Positioning Systems, GEOG 217 Mapping Science in the 21st Century, GEOG 317 Cartography I: Introduction to Cartography or NRES 420 Applications of Remote Sensing in Agriculture and Natural Resources</td>
<td>2-4</td>
</tr>
<tr>
<td>Select one from: NRES 399 Independent Research, NRES 496 Independent Study, NRES 497 Career Experience, NRES 499 Thesis Research, NRES 499H Honors Thesis</td>
<td>1-3</td>
</tr>
</tbody>
</table>

Fisheries Ecology and Management Option Electives (12 Hours):

Select from (at least 6 hours must be 300- or 400-level):

### Agricultural Economics courses

AECN 265 Resource Economics I (3 cr)

### Agronomy courses

AGRO 489 Urbanization of Rural Landscapes (3 cr)

### Biological Sciences courses

BIOS 373 Biopsychology (3 cr)
BIOS 381 Invertebrate Zoology (4 cr)
BIOS 454 Ecological Interactions (4 cr)
BIOS 462 Animal Behavior (3 cr)
BIOS 468 Field Animal Behavior (4 cr)
BIOS 472 Evolution (4 cr)
BIOS 474 Herpetology (4 cr)
BIOS 475 Ornithology (3 cr)
BIOS 476 Mammalogy (4 cr)
BIOS 487 Field Parasitoligy (4 cr)
BIOS 488 Natural History of the Invertebrates (4 cr)

### Chemistry courses

CHEM 251 Organic Chemistry

### Entomology courses

ENTO 402/402L Aquatic Insects/Lab (3 Cr)
ENTO 411 Field Entomology (4 Cr)

### Management courses

MNGT 300 Management Essentials for Contemporary Organizations (3 cr)

### Mathematics courses

MATH 107 Calculus II (4 cr)
MATH 208 Calculus III (4 cr)
MATH 238 Mathematical Methods for Biology & Medicine (5 cr)

### Natural Resources courses

NRES 104 Climate in Crisis (3 cr)
NRES 211 Intro to Conservation Biology (3 cr)
NRES 270 Biological Invaders (3 cr)
NRES 308 Biogeography (3 cr)
NRES 316 Case Studies in Theoretical Ecology (3 cr)
NRES 388 Employment Seminar (1 cr)
NRES 423 Integrated Resource Management (3 cr)
NRES 428 Leadership in Public Organizations (3 cr)
NRES 434 Environmental Education & Interpretation (3 cr)
NRES 450 Biology of Wildlife Populations (4 cr)
NRES 484 Water Resources Seminar (1 cr)
NRES 487 Intro to Landscape Ecology (3 cr)
NRES 489 Ichthyology (4 cr)
NRES 492 Natural Resources Study Tours (variable credit)

### Philosophy courses

PHIL 225 Environmental Ethics (3 cr)

### Physics courses

PHYS 142 Elementary General Physics II (5 cr)
PHYS 211 General Physics I (4 cr)
PHYS 212 General Physics II (4 cr)

### Political Science courses

POLS 210 Bureaucracy & the American Political System (3 cr)

And/or any optional courses listed but not taken under the Base Science Courses, Fisheries and Wildlife Courses, or Option Requirements headings in this program.

### Free electives: 6 hours

This option is designed for students considering careers in fisheries biology, biological research, and fisheries management. Completion of this program also provides excellent preparation for graduate study.

Students completing the Fisheries Ecology and Management option qualify for professional certification in the American Fisheries Society (AFS). Students are encouraged to consult with their advisor and the AFS website for further information. AFS requires a minimum grade of a C to receive credit for courses that apply toward professional certification.

NP Course may not be taken as Pass/No Pass by FWL majors.