

# BIOLOGICAL SCIENCES

## BACHELOR OF SCIENCE IN FISHERIES & WILDLIFE SCIENCES

The fisheries and wildlife science program is a professional program designed to prepare qualified field and research biologists, as well as to provide a sound foundation for those students who intend to pursue graduate studies in wildlife biology, fisheries biology or field ecology. Through selection of elective courses, graduates are required to meet certification requirements of The Wildlife Society or the American Fisheries Society.

Field biologists are employed by various state and federal agencies concerned with natural resources management including the Arkansas Game and Fish Commission, U.S. Fish and Wildlife Service, U.S. Forest Service, Arkansas Department of Environmental Quality, National Park Service, and the U.S. Army Corps of Engineers. Employment opportunities in the private sector are also available. Timber, mining, and utility companies hire field biologists for advice and management of industrial lands. Environmental consulting firms, commercial fish and game farms, and nature centers require qualified researchers, technicians, and educators.

Majors in fisheries and wildlife science must complete a minimum of 120 semester hours as specified in the following curriculum outline and no more than 12 hours of "D's" may be applied toward the degree. Note, this set of courses will also satisfy requirements for a minor in biology, but students should see their advisor to complete the associated degree audit form for the minor. Candidates for graduation are expected to complete a comprehensive series of practical and technical exams to assess mastery of program objectives.

**Dr. Tom Nupp, Director**

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### Curriculum

The matrix below is a sample plan for all coursework required for this program.

#### Freshman

Fall	Credits
ENGL 1013 <sup>1</sup>	3
SS 1XXX <sup>1</sup>	3
MATH 1113	3
BIOL 1114	4
FW 1001	1
<b>Total Hours</b>	<b>14</b>

Spring	Credits
ENGL 1023 <sup>1</sup>	3
SS 1XXX <sup>1</sup>	3
CHEM 1113 and CHEM 1111 or CHEM 2124 and CHEM 2120	4
BIOL 2124	4
<b>Total Hours</b>	<b>14</b>

#### Sophomore

Fall	Credits
FW 2013	3

Fall	Credits
BIOL 2134	4
CHEM 2204	4
Statistics <sup>2</sup> , FW 3084 <sup>3F</sup> or FW 3154 <sup>3w</sup>	3-4
<b>Total Hours</b>	<b>14-15</b>

Spring	Credits
USHG 1XXX <sup>1</sup>	3
FW 2833/GEOG 2833	3
SP 1XXX <sup>1</sup>	3
FW 3114	4
Statistics <sup>2</sup> or FW 3144	3-4
<b>Total Hours</b>	<b>16-17</b>

**Junior**

Fall	Credits
BIOL 4044 or electives <sup>4</sup>	4
Statistics <sup>2</sup> or Math <sup>5</sup>	3
FW 4014 <sup>w</sup> , FW 4064 <sup>3w</sup> or Electives <sup>4</sup>	4
Electives <sup>4</sup>	3
<b>Total Hours</b>	<b>14</b>

Spring	Credits
FAH 1XXX <sup>1</sup>	3
BIOL 3004 <sup>3</sup> or Electives <sup>4</sup>	4
FW 3053	3
FW 4003	3
FW 4024 <sup>3F</sup> or Electives <sup>4</sup>	4
<b>Total Hours</b>	<b>17</b>

**Senior**

Fall	Credits
FW 4043 <sup>F</sup> or Electives <sup>w</sup>	3
FW 4103	3

Fall	Credits
Electives <sup>4</sup>	9
<b>Total Hours</b>	<b>15</b>

Spring	Credits
FAH 1XXX <sup>1</sup>	3
FW 4001	1
FW 4013 <sup>W</sup> or Electives <sup>F</sup>	3
FW 4083	3
Electives <sup>4</sup>	5
<b>Total Hours</b>	<b>15</b>

<sup>1</sup>See appropriate alternatives or substitutions in "General Education Requirements". One of the social sciences must be ECON 2003.

<sup>2</sup>Statistics must be taken either fall or spring term.

<sup>3</sup>F and W superscripts designate courses required for certification in fisheries and wildlife, respectively. Students seeking wildlife certification must choose one course from each of the following course sequences: (1) FW 3154 or FW 3144 (2) FW 4014 or FW 4064. Students seeking fisheries certification must choose FW 3084 and FW 4024 Meeting requirements for fisheries or wildlife certification is a requirement for graduation.

<sup>4</sup>Must include at least two courses from the biology group (BIOL 3174, BIOL 3034, BIOL 4064, BIOL 3064, AGPM 3104, BIOL 3184, BIOL 3004, BIOL 3033, BIOL 4043, BIOL 4044, BIOL 4094) one course from the physical science group elective (any physics course, AGSS 2014, GEOL 1014), and three 3000-4000 level fisheries and wildlife elective courses. Sufficient additional electives to produce 120 total credit hours are required for graduation.

<sup>5</sup>Must include one of the following courses: FW 3173 Biostatistics, STAT 2303/2000 Statistical Methods/Statistical Packages Lab, STAT 3133 Regression Analysis, STAT 4153 Experimental Design, or Calculus.