Submit originals and one copy and electronic copy to Governance/Faculty Senate Office (email electronic copy to fysenat@uaf.edu)

PROGRAM/DEGREE REQUIREMENT CHANGE (MAJOR/MINOR)

SUBMITTED BY:

<table>
<thead>
<tr>
<th>Department</th>
<th>College/School</th>
<th>Natural Sciences and Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology and Wildlife</td>
<td></td>
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</tr>
<tr>
<td>Prepared by</td>
<td>Phone</td>
<td>474-7142</td>
</tr>
<tr>
<td>Perry Barboza</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Email Contact</td>
<td>Faculty Contact</td>
<td>Perry Barboza</td>
</tr>
<tr>
<td><a href="mailto:ffpsb@uaf.edu">ffpsb@uaf.edu</a></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

See http://www.uaf.edu/uafgov/faculty/cd for a complete description of the rules governing curriculum & course changes.

PROGRAM IDENTIFICATION:

<table>
<thead>
<tr>
<th>DEGREE PROGRAM</th>
<th>Wildlife Biology - Biological Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree Level:</td>
<td>(i.e., Certificate, A.A., A.A.S., B.A., BS., M.A., M.S., Ph.D.)</td>
</tr>
<tr>
<td></td>
<td>BS, MS, PhD</td>
</tr>
</tbody>
</table>

A. CHANGE IN DEGREE REQUIREMENTS: (Brief statement of program/degree changes and objectives)

The Department of Biology and Wildlife offers degrees under three headings in the catalog: Biological Sciences, Biology, and Wildlife Biology. Biology includes MS and MAT degrees. Wildlife Biology includes BS and MS degrees. Biological Sciences includes BS, BA and PhD degrees. The doctoral degrees in Biological Sciences offer four concentrations: Biology, Botany, Wildlife Biology, and Zoology.

We propose to change the name of the degrees in Wildlife Biology to Wildlife Biology and Conservation because most of our students enter careers in agencies and companies that are tasked with some aspect of wildlife conservation. Furthermore we propose moving the PhD Biological Sciences (concentration Wildlife Biology) to the listing for Wildlife Biology and Conservation. All the wildlife biology degrees will therefore fall under one listing entitled Wildlife Biology and Conservation (BS, MS, PhD Degrees). These changes to the catalog allow us to better market and brand the wildlife program for our students and their potential employers and more accurately reflects the training students receive in our degree program.

B. CURRENT REQUIREMENTS AS IT APPEARS IN THE CATALOG:

Wildlife Biology
College of Natural Science and Mathematics
Department of Biology and Wildlife
(907) 474-7671
www.bw.uaf.edu
B.S. Degree
Minimum Requirements for Degree: 130 credits
The undergraduate wildlife program provides basic education and training. This degree is designed for students whose objective is to accomplish the research needed to provide additional information on wild animal populations, their habitat and habitat-animal relationships. This degree is also for students whose primary interests involve interpreting, applying or disseminating research findings, rather than their acquisition. A wildlife B.S. degree is appropriate for students contemplating careers in wildlife agency administration, in developing and implementing wildlife management plans and in public information and education. The curriculum provides a solid foundation for graduate study and meets requirement for certification by The Wildlife Society. The geographic location of the university is particularly advantageous for the study of wildlife biology. Spruce forest, aspen-birch forest, alpine tundra, bogs and several types of aquatic habitats are within easy reach. Studies can be made in many other habitats ranging from the dense forests of southeastern Alaska to arctic tundra.
Adequate study collections of plants and animals are available, and a 2,000-acre study area is near the campus. Wildlife biology students have ample opportunity for close association with the personnel of the Alaska Cooperative Fish and Wildlife Research Unit, Institute of Arctic Biology and several local offices of the federal and state conservation agencies. These agencies often provide support for graduate student projects, and program faculty usually hire a number of students for summer field
work. Thus, an unusually good opportunity is available for students to
gain experience and to make job connections.

Major—B.S. Degree
1. Complete the general university requirements. (See page 116.
   As part of the core curriculum requirements, complete COMM
   141X.)
2. Complete the B.S. degree requirements (page 121).
3. Complete the following program (major) requirements:
   a. Complete the following:
      BIOL 105X—Fundamentals of Biology I*** .................. 4
      BIOL 106X—Fundamentals of Biology II*** .................. 4
      BIOL 239—Introduction to Plant Biology .................. 4
      BIOL 271—Principles of Ecology .......................... 4
      BIOL 310—Animal Physiology ............................. 4
      BIOL 311—Comparative Anatomy of Vertebrates .......... 4
      BIOL 311—Systematic Botany ............................. 4
      BIOL 362—Principles of Genetics ........................ 4
      BIOL 425—Mammalogy .................................... 3
      BIOL 426W,O/2—Ornithology .................................. 3
      ENGL 314W,O/2—Technical Writing (3)
      or ENGL 414W—Research Writing (3) ......................... 3
      NRM 101—Natural Resources Conservation and Policy ... 3
      or NRM 407—Environmental Law (3) ......................... 3
      WLF 101—Survey of Wildlife Science ........................ 1
      WLF 201—Wildlife Management Principles .................. 3
      WLF 303W—Wildlife Management Techniques ................. 3
      WLF 410—Wildlife Populations and Their Management ... 3
      WLF 460—Wildlife Nutrition .............................. 3
   b. Complete at least one of the following:
      BIOL 471—Population Ecology .............................. 3
      WLF 433—Conservation Genetics ............................. 3
      WLF 469O—Landscape Ecology and Wildlife Habitat .......... 3
   c. Complete the following:
      CHEM 105X—General Chemistry** .......................... 4
      CHEM 106X—General Chemistry** .......................... 4
      MATH 200X—Calculus (4)** ................................. 4
      or MATH 272X—Calculus for Life Sciences (3)** .... 3–4
      PHYS 103X—College Physics ............................... 4
      STAT 200X—Elementary Probability and Statistics (3)** 3–4
      or STAT 300—Statistics (3)** ............................. 3
      STAT 401—Regression and Analysis of Variance*** .... 4
   d. Complete three of the following:
      BIOL 303—Principles of Metabolism and Biochemistry .... 4
      BIOL 406—Entomology ..................................... 4
      BIOL 407—Aquatic Entomology ............................... 3
      BIOL 427—Ichthyology ..................................... 3
      BIOL 441W,O/2—Animal Behavior ........................... 3
      BIOL 444—Reproductive Biology ............................ 3
      BIOL 472—Community Ecology .............................. 3
      BIOL 473W—Limnology ..................................... 3
      BIOL 474—Plant Ecology ................................... 4
      BIOL 481—Principles of Evolution ........................ 3
      NRM 312—Introduction to Range Management ............... 3
      NRM 338—Introduction to Geographic Information Systems 3
      NRM 341—GIS Analysis .................................... 4
      NRM 370—Introduction to Watershed Management .......... 3
      NRM 380W—Soils and the Environment ...................... 3
      NRM 450—Forest Management ............................... 3
      WLF 305—Wildlife Diseases ................................ 3
      WLF 419O/2—Waterfowl and Wetlands Ecology and
      Management .................................................. 4
   4. Complete electives
   5. Minimum credits required .................................. 130
      * Student must earn a C grade or better in each course.
      ** Satisfies a core requirement.
      *** Satisfies a B.S. degree requirement.

Note: B.S. degree candidates are strongly urged to obtain work experience in
wildlife-related positions with public resource agencies or private firms. Faculty
members can help students contact potential employers.
Major—B.S. Degree
1. Complete the general university requirements. (See page 116. As part of the core curriculum requirements, complete COMM 141X.)
2. Complete the B.S. degree requirements (page 121).
3. Complete the following program (major) requirements:
   a. Complete the following:
      BIOL 105X—Fundamentals of Biology I***.................................4
      BIOL 106X—Fundamentals of Biology II**.................................4
      BIOL 239—Introduction to Plant Biology..................................4
      BIOL 271—Principles of Ecology...........................................4
      BIOL 310—Animal Physiology...............................................4
      BIOL 317—Comparative Anatomy of Vertebrates........................4
      BIOL 331—Systematic Botany...............................................4
      BIOL 362—Principles of Genetics.........................................4
      BIOL 425—Mammalogy.......................................................3
      BIOL 426W,O/2—Ornithology...............................................3
      ENGL 314W,O/2—Technical Writing (3)
      or ENGL 414W—Research Writing (3).................................3
      NRM 101—Natural Resources Conservation and Policy................3
      NRM/WLF 431—Wildlife Law and Policy (3)
      or NRM 407—Environmental Law (3).................................3
      WLF 101—Survey of Wildlife Science................................1
      WLF 201—Wildlife Management Principles................................3
      WLF 303W—Wildlife Management Techniques............................3
      WLF 410—Wildlife Populations and Their Management................3
      WLF 460—Wildlife Nutrition.............................................3
   b. Complete at least one of the following:
      BIOL 471—Population Ecology...........................................3
      WLF 433—Conservation Genetics.........................................3
      WLF 469O—Landscape Ecology and Wildlife Habitat..................3

Minor
1. Complete the following:
   WLF 303W—Wildlife Management Techniques............................3
   WLF 410—Wildlife Populations and Their Management................3
   WLF 460—Wildlife Nutrition.............................................3
   Approved BIOL and WLF electives*.......................................6
2. Minimum credits required..................................................15
   * Only biology or wildlife electives that are not required for the student’s major.
   Note: Prerequisites for required courses include BIOL 105X-106X, BIOL 271, BIOL 310, STAT 200X or 300, and WLF 201. Depending upon a student’s major, some of
   these prerequisites may satisfy the 6 elective credits in biology and wildlife required
   for this minor.

Wildlife Biology
College of Natural Science and Mathematics
Department of Biology and Wildlife
(907) 474-7671
www.bw.uaf.edu

M.S. Degree
Minimum Requirements for Degree: 30 credits
The geographic location of the university is particularly advantageous
for the study of wildlife biology. Spruce forest, aspen-birch forest, alpine
tundra, bogs and several types of aquatic habitats are within easy reach.
Studies can be made in many other habitats ranging from the dense
forests of southeastern Alaska to arctic tundra.
Adequate study collections of plants and animals are available, and
a 2,000-acre study area is near the campus. Wildlife biology students
have ample opportunity for close association with the personnel of
the Alaska Cooperative Fish and Wildlife Research Unit, Institute of
Arctic Biology and several local offices of federal and state conservation
agencies. These agencies often provide support for graduate student
projects, and program faculty usually hire a number of students for
summer field work. Exceptional opportunities are available for students
to gain experience and make job connections.
The Department of Biology and Wildlife, the Institute of Arctic
Biology, and the Alaska Cooperative Fish and Wildlife Research Unit
cooperate in offering graduate work leading to the M.S. and Ph.D.
degrees. Detailed information on the graduate program in wildlife biology and management is available from the wildlife program faculty chair.

The Alaska Cooperative Fish and Wildlife Research Unit and Institute of Arctic Biology offer a limited number of research assistantships. Teaching assistantships are available in the Department of Biology and Wildlife.

Graduate Program—M.S. Degree
1. Complete the following admission requirement:
   a. Submit scores from both the GRE general test (required) and the GRE subject test in biology (highly recommended).
   b. If English is not your native language, submit scores from both the Test of Spoken English (TSE) and the Test of Written English (TWE), as well as TOEFL scores. Requests, including justification, for exceptions to this requirement should be made to the chair of the department.

2. Complete the general university requirements (page 182).
3. Complete the M.S.—with Thesis degree requirements (page 188).*
4. As part of the M.S. degree requirements, complete and pass the departmental written and oral masters comprehensive examination.
5. Minimum credits required .......................................................... 30

* Students working in subject areas involving significant non-English literature will be expected to read the appropriate foreign language.

See Biological Sciences for Ph.D. program.

See Biology.

Biological Sciences
College of Natural Science and Mathematics
Department of Biology and Wildlife
907-474-7671
www.bw.ua.edu

Ph.D. Degree

Minimum Requirements for Degree: 18 thesis credits

The biological sciences program provides a broad education as well as a sound foundation in the basic principles of biology. Candidates who expect to teach in public secondary schools must be sure that education requirements are met.

Graduate Program — Ph.D. Degree

Concentrations: Biology, Botany, Wildlife Biology, Zoology

1. Complete the admission process including the following:
   a. Submit scores from both the GRE General Test (required) and the GRE Subject Test in Biology (required for applicants holding only a bachelor’s degree; highly recommended for applicants who have already earned a master’s degree).
   b. If English is not your native language, submit scores from both the Test of Spoken English (TSE) and the Test of Written English (TWE), as well as TOEFL scores. Requests, including justification, for exceptions to this requirement should be made to the chair of the department.

2. Complete the general university requirements (page 192).
3. Complete the Ph.D. degree requirements (page 196).
4. As part of the Ph.D. degree requirement, complete the following:
   a. If entering with only a bachelor’s degree, complete and pass the departmental written and oral Ph.D. qualifying examination.
   b. Complete and pass a written and oral comprehensive examination by the graduate advisory committee.
   c. In this program or in previous post-baccalaureate programs, complete course work at least equivalent to that required for the M.S. degree.

5. Minimum credits required .......................................................... 18

See Biology.

See Wildlife Biology.
C. PROPOSED REQUIREMENTS AS IT WILL APPEAR IN THE CATALOG WITH THESE CHANGES:
(Underline new wording strike-through-old- wording and use complete catalog format)

Wildlife Biology and Conservation
College of Natural Science and Mathematics
Department of Biology and Wildlife
(907) 474-7671
www.bw.uaf.edu
B.S. Degree
Minimum Requirements for Degree: 130 credits
The undergraduate wildlife program provides basic education and training. This degree is designed for students whose objective is to accomplish the research needed to provide additional information on wild animal populations, their habitat and habitat-animal relationships. This degree is also for students whose primary interests involve interpreting, applying or disseminating research findings, rather than their acquisition. A wildlife B.S. degree is appropriate for students contemplating careers in wildlife agency administration, in developing and implementing wildlife management plans and in public information and education. The curriculum provides a solid foundation for graduate study and meets requirement for certification by The Wildlife Society. The geographic location of the university is particularly advantageous for the study of wildlife biology. Spruce forest, aspen-birch forest, alpine tundra, bogs and several types of aquatic habitats are within easy reach. Studies can be made in many other habitats ranging from the dense forests of southeastern Alaska to arctic tundra.

Adequate study collections of plants and animals are available, and a 2,000-acre study area is near the campus. Wildlife biology students have ample opportunity for close association with the personnel of the Alaska Cooperative Fish and Wildlife Research Unit, Institute of Arctic Biology and several local offices of the federal and state conservation agencies. These agencies often provide support for graduate student projects, and program faculty usually hire a number of students for summer field work. Thus, an unusually good opportunity is available for students to gain experience and to make job connections.

Major—B.S. Degree
1. Complete the general university requirements. (See page 116.
As part of the core curriculum requirements, complete COMM
141X.)
2. Complete the B.S. degree requirements (page 121).
3. Complete the following program (major) requirements:*
a. Complete the following:
   BIOL 115X—Fundamentals of Biology I**.........................4
   BIOL 116X—Fundamentals of Biology II*.........................4
   BIOL 239—Introduction to Plant Biology.........................4
   BIOL 271—Principles of Ecology..................................4
   BIOL 310—Animal Physiology......................................4
   BIOL 317—Comparative Anatomy of Vertebrates..................4
   BIOL 331—Systematic Botany......................................4
   BIOL 362—Principles of Genetics................................4
   BIOL 425—Mammalogy..............................................3
   BIOL 426W/O2—Ornithology.......................................3
   ENGL 314W/O2—Technical Writing (3)
   or ENGL 414W—Research Writing (3)............................3
   NRM 101—Natural Resources Conservation and Policy........3
   NRM/WLF 431—Wildlife Law and Policy (3)
   or NRM 407—Environmental Law (3).............................3
   WLF 101—Survey of Wildlife Science............................1
   WLF 201—Wildlife Management Principles.......................3
   WLF 303W—Wildlife Management Techniques.....................3
   WLF 410—Wildlife Populations and Their Management.........3
   WLF 460—Wildlife Nutrition......................................3
b. Complete at least one of the following:
   BIOL 471—Population Ecology.....................................3
   WLF 433—Conservation Genetics..................................3
   WLF 469O—Landscape Ecology and Wildlife Habitat.............3
c. Complete the following:
   CHEM 105X—General Chemistry**...............................4
   CHEM 106X—General Chemistry**...............................4
   MATH 200X—Calculus (4)**
or MATH 272X—Calculus for Life Sciences (3) .......................... 3-4
PHYS 103X—College Physics......................................................... 4
STAT 200X—Elementary Probability and Statistics (3) .......................... 4
or STAT 300—Statistics (3) .......................................................... 3
STAT 401—Regression and Analysis of Variance................................. 4
d. Complete three of the following:

BIOL 303—Principles of Metabolism and Biochemistry.................... 4
BIOL 406—Entomology................................................................. 4
BIOL 407—Aquatic Entomology....................................................... 3
BIOL 427—Ichthyology................................................................. 3
BIOL 441W,O/2—Animal Behavior.................................................. 3
BIOL 444—Reproductive Biology..................................................... 3
BIOL 472—Community Ecology...................................................... 3
BIOL 473W—Limnology................................................................. 4
BIOL 474—Plant Ecology............................................................... 4
BIOL 481—Principles of Evolution.................................................... 3
NRM 312—Introduction to Range Management................................... 3
NRM 338—Introduction to Geographic Information Systems................ 3
NRM 341—GIS Analysis............................................................... 4
NRM 370—Introduction to Watershed Management............................. 3
NRM 380W—Soils and the Environment.......................................... 3
NRM 450—Forest Management.................................................... 3
WLF 305—Wildlife Diseases.......................................................... 3
WLF 419O/2—Waterfowl and Wetlands Ecology and Management........... 4

4. Complete electives
5. Minimum credits required......................................................... 130

*Student must earn a C grade or better in each course.
** Satisfies a core requirement.
*** Satisfies a B.S. degree requirement.

Note: B.S. degree candidates are strongly urged to obtain work experience in wildlife-related positions with public resource agencies or private firms. Faculty members can help students contact potential employers.

Major—B.S. Degree
1. Complete the general university requirements. (See page 116.
As part of the core curriculum requirements, complete COMM
141X.)
2. Complete the B.S. degree requirements (page 121).
3. Complete the following program (major) requirements:

a. Complete the following:

BIOL 155X—Fundamentals of Biology I ............................... 4
BIOL 156X—Fundamentals of Biology II .................................. 4
BIOL 239—Introduction to Plant Biology.................................. 4
BIOL 271—Principles of Ecology............................................. 4
BIOL 310—Animal Physiology.................................................. 4
BIOL 317—Comparative Anatomy of Vertebrates......................... 4
BIOL 331—Systematic Botany.................................................. 4
BIOL 362—Principles of Genetics.......................................... 4
BIOL 425—Mammalogy............................................................. 3
BIOL 426W,O/2—Ornithology.................................................... 3
ENGL 314W,O/2—Technical Writing (3)
or ENGL 414W—Research Writing (3) .................................... 3
NRM 101—Natural Resources Conservation and Policy.................... 3
NRM/WLF 431—Wildlife Law and Policy (3)
or NRM 407—Environmental Law (3) ..................................... 3
WLF 101—Survey of Wildlife Science........................................ 1
WLF 201—Wildlife Management Principles.................................. 3
WLF 303W—Wildlife Management Techniques................................ 3
WLF 410—Wildlife Populations and Their Management.................... 3
WLF 460—Wildlife Nutrition..................................................... 3

b. Complete at least one of the following:

BIOL 471—Population Ecology.................................................. 3
WLF 433—Conservation Genetics............................................ 3
WLF 469O—Landscape Ecology and Wildlife Habitat....................... 3

Minor
1. Complete the following:

WLF 303W—Wildlife Management Techniques............................... 3
WLF 410—Wildlife Populations and Their Management.................... 3
Approved BIOL and WLF electives* ........................................... 6
2. Minimum credits required .............................................. 15
* Only Biology or Wildlife electives that are not required for the student’s major.
Note: Prerequisites for required courses include BIOL 105X-106X, BIOL 271, BIOL 310, STAT 200X or 300, and WLF 201. Depending upon a student’s major, some of these prerequisites may satisfy the 6 elective credits in biology and wildlife required for this minor.

Wildlife Biology and Conservation
College of Natural Science and Mathematics
Department of Biology and Wildlife
(907) 474-4671
www.bw.uaa.edu

M.S. Degree, PhD Degrees
Minimum Requirements for Degrees: M.S.: 30 credits; Ph.D.: 18 thesis credits.
The geographic location of the university is particularly advantageous for the study of wildlife biology. Spruce forest, aspen-birch forest, alpine tundra, bogs and several types of aquatic habitats are within easy reach. Studies can be made in many other habitats ranging from the dense forests of southeastern Alaska to arctic tundra. Adequate study collections of plants and animals are available, and a 2,000-acre study area is near the campus. Wildlife biology students have ample opportunity for close association with the personnel of the Alaska Cooperative Fish and Wildlife Research Unit, Institute of Arctic Biology and several local offices of federal and state conservation agencies. These agencies often provide support for graduate student projects, and program faculty usually hire a number of students for summer field work. Exceptional opportunities are available for students to gain experience and make job connections.
The Department of Biology and Wildlife, the Institute of Arctic Biology, and the Alaska Cooperative Fish and Wildlife Research Unit cooperate in offering graduate work leading to the M.S. and Ph.D. degrees. Detailed information on the graduate program in wildlife biology and management is available from the chair of the graduate program faculty.
The Alaska Cooperative Fish and Wildlife Research Unit and Institute of Arctic Biology offer a limited number of research assistantships. Teaching assistantships are available in the Department of Biology and Wildlife.

Graduate Program—M.S. Degree
1. Complete the following admission requirement:
a. Submit scores from both the GRE general test (required) and the GRE subject test in biology (highly recommended).
b. If English is not your native language, submit scores from both the Test of Spoken English (TSE) and the Test of Written English (TWE), as well as TOEFL scores. Requests, including justification, for exceptions to this requirement should be made to the chair of the department.
2. Complete the general university requirements (page 182).
3. Complete the M.S.—with Thesis degree requirements (page 188).*
4. As part of the M.S. degree requirements, complete and pass the departmental written and oral masters comprehensive examination.
5. Minimum credits required .............................................. 30

Graduate Program—Ph.D. Degree
1. Complete the admission process including the following:
a. Submit scores from both the GRE General Test (required) and the GRE Subject Test in Biology (required for applicants holding only a bachelor’s degree; highly recommended for applicants who have already earned a master’s degree).
b. If English is not your native language, submit scores from both the Test of Spoken English (TSE) and the Test of Written English (TWE), as well as TOEFL scores. Requests, including justification, for exceptions to this requirement should be made to the chair of the department.
2. Complete the general university requirements (page 192).
3. Complete the Ph.D. degree requirements (page 196).
4. As part of the Ph.D. degree requirement, complete the following:
a. If entering with only a bachelor's degree, complete and pass the departmental written and oral Ph.D. qualifying examination.
b. Complete and pass a written and oral comprehensive examination by the graduate advisory committee.
c. In this program or in previous post-baccalaureate programs, complete course work at least equivalent to that required for the M.S. degree.

5. Minimum credits required ........................................... 18

See Biology.
See Wildlife Biology.

* Students working in subject areas involving significant non-English literature will be expected to read the appropriate foreign language.

See also Biological Sciences for Ph.D. program.
See also Biology for M.S., M.A.T program.

Biological Sciences
College of Natural Science and Mathematics
Department of Biology and Wildlife
907-474-7671
www.bw.ua.edu

Ph.D. Degree

Minimum Requirements for Degree: 18 thesis credits
The biological sciences program provides a broad education as well as a sound foundation in the basic principles of biology. Candidates who expect to teach in public secondary schools must be sure that education requirements are met.

Graduate Program — Ph.D. Degree
Concentrations: Biology, Botany, Wildlife-Biology, Zoology

1. Complete the admission process including the following:
a. Submit scores from both the GRE General Test (required) and the GRE Subject Test in Biology (required for applicants holding only a bachelor’s degree; highly recommended for applicants who have already earned a master’s degree).
b. If English is not your native language, submit scores from both the Test of Spoken English (TSE) and the Test of Written English (TWE), as well as TOEFL scores. Requests, including justification, for exceptions to this requirement should be made to the chair of the department.

2. Complete the general university requirements (page 192).
3. Complete the Ph.D. degree requirements (page 196).
4. As part of the Ph.D. degree requirement, complete the following:
a. If entering with only a bachelor’s degree, complete and pass the departmental written and oral Ph.D. qualifying examination.
b. Complete and pass a written and oral comprehensive examination by the graduate advisory committee.
c. In this program or in previous post-baccalaureate programs, complete course work at least equivalent to that required for the M.S. degree.

5. Minimum credits required ........................................... 18

See Biology.
See Wildlife Biology.

D. ESTIMATED IMPACT

<table>
<thead>
<tr>
<th>WHAT IMPACT, IF ANY, WILL THIS HAVE ON BUDGET, FACILITIES/SPACE, FACULTY, ETC.</th>
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</thead>
<tbody>
<tr>
<td>These changes will not alter the budget, facilities, space or faculty required for the program. We are simply changing the name and catalog listing of the program to better address the interests of our students and their prospective employers. We expect that the name changes will probably increase enrollments by attracting more students to the program. Similar changes in wildlife programs at other institutions have improved enrollments.</td>
</tr>
</tbody>
</table>

E. IMPACTS ON PROGRAMS/DEPTS:

<table>
<thead>
<tr>
<th>What programs/departments will be affected by this proposed action?</th>
<th>include information on the Programs/Departments contacted (e.g., email, memo)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The requirements for all three degrees are unchanged. We do not expect these changes in the catalog to affect any other units.</td>
<td></td>
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</tbody>
</table>
### Intended Outcomes/Objectives

<table>
<thead>
<tr>
<th>1. Students will be fluent in the terminology of wildlife biology, wildlife management, conservation biology and general biology.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wildlife degrees require successful completion of courses that can lead to certification by The Wildlife Society. It is the intent of these courses to build a strong foundation in the biological sciences.</td>
</tr>
<tr>
<td>Courses will be evaluated as needed by the wildlife faculty and by the Teaching Advisory Committee. Changes will be recommended and implemented.</td>
</tr>
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</table>

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<tr>
<th>2. Students will be familiar with problem solving skills and quantitative approaches to wildlife biology.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Same criteria as #1. In addition student surveys of graduating seniors (yearly) and alumni (every other year) will be conducted.</td>
</tr>
<tr>
<td>Course and survey information collated by department staff and evaluated by the wildlife faculty and Teaching Advisory Committee.</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>3. Students will exhibit effective oral and written communication skills.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate students will complete written and seminar projects in WLF 201 and WLF 410. Evaluations from other oral and writing intensive biology courses will also be used for information. Graduate students will complete written and oral components of the comprehensive exams.</td>
</tr>
<tr>
<td>Success of undergraduate students is dependent on satisfactory completion of written and oral projects in senior courses such as WLF 410 and in individual research projects. Success of graduate students is judged by satisfactory completion of the thesis defense and the thesis as well as any publications.</td>
</tr>
</tbody>
</table>

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<tr>
<th>4. Some students will successfully obtain employment with management agencies. Undergraduates will continue their education at the graduate level, or be satisfied that the degree met their personal objectives.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student survey of graduating seniors and alumni</td>
</tr>
<tr>
<td>Survey results evaluated by Wildlife faculty and Teaching Advisory Committee</td>
</tr>
</tbody>
</table>
JUSTIFICATION FOR ACTION REQUESTED

The purpose of the department and campus-wide curriculum committees is to scrutinize program/degree change applications to make sure that the quality of UAF education is not lowered as a result of the proposed change. Please address this in your response. This section needs to be self-explanatory. If you drop a course, is it because the material is covered elsewhere? Use as much space as needed to fully justify the proposed change and explain what has been done to ensure that the quality of the program is not compromised as a result.

Wildlife biology integrates elements of biological sciences for applications in wildlife conservation and management. Our program trains students to practice wildlife biology for organizations that are responsible for managing populations of wild animals for a variety of goals that range from sustainable harvest of abundant species to conservation of habitats for endangered species. The BS degree in Wildlife Biology meets the requirements for certification as a Wildlife Biologist in The Wildlife Society, the professional society of wildlife management. The inclusion of the word “conservation” in our program title emphasizes the applied nature of our program for both our students and their prospective employers. We are simply reinforcing our brand, marketing of our program, and more accurately reflecting the training that our students already receive. The resources and the content of the program are not changed, rather the change reflects the gradual shifts in the emphases of our discipline and its application. We propose to move the doctoral degree that emphasizes wildlife biology from Biological Sciences to Wildlife Biology and Conservation to better present the package of degrees we have offered for several decades.

Graduate training in wildlife biology began with the formation of the Wildlife Research Unit in 1950, which became the Alaska Cooperative Fish and Wildlife Research Unit in 1991. The first two MS degrees in wildlife biology were awarded in 1952. Wildlife research was extended with the formation of the Institute of Arctic Biology in 1962. The first PhD in biology and wildlife was awarded in 1974. We have produced over 530 theses in biology and wildlife since 1952 including 48 MS theses on wildlife between 1990 and 2005, and 33 doctoral theses on wildlife between 1986 and 2006. Our program has trained commissioners for Departments of Fish and Game and Natural Resources as well as over 40 other positions in research and management for the Alaska Departments of Fish and Game, Natural Resources, Environmental Conservation, and Public Facilities. Furthermore, our graduates hold at least 20 positions at the U.S. Department of Interior (National Parks Service, Fish and Wildlife Service, Geological Survey) and at least 10 positions in private-sector organizations (Audubon, Ducks Unlimited, Defenders of Wildlife and World Wildlife Fund).

These changes do not affect the resources required for our program, but do allow us to increase the visibility of the program for prospective students and for donors. The program has been approached by the Boone and Crockett Club to establish an endowed chair in Wildlife Biology and Conservation that will complement our broad base of support from agencies and local organizations.

APPROVALS:

Signature, Chair, Program/Department of: Richard D. Boone
Date 9/18/08

Signature, Chair, College/School Curriculum Council for: CNSM - Diane Wagner
Date 9/22/08

Signature, Dean, College/School of: College of Natural Science and Mathematics - John Neudrick
Date 4/19/08

ALL SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSION TO THE GOVERNANCE OFFICE

Signature, Chair, UAF Faculty Senate Curriculum Review Committee Date