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PROGRAM/DEGREE REQUIREMENT CHANGE (MAJOR/MINOR)

SUBMITTED BY:

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

PROGRAM IDENTIFICATION:

DEGREE PROGRAM
Biological Sciences

Degree Level: (i.e., Certificate, A.A., A.A.S., B.A., B.S., M.A., M.S., Ph.D.)
B.A. and B.S.

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

The Biology and Wildlife department has chosen to reduce the number of credits required to obtain a B.A. or B.S. degree from 130 to 120.

B. CURRENT REQUIREMENTS AS IT APPEARS IN THE CATALOG:

Minimum Requirements for Degrees: 130 credits

The biological sciences program provides a broad education and sound foundation in the basic principles of biology. Students who major in biological sciences may pursue either a B.A. or B.S. degree. The B.A. requires fewer credits in the major field than the B.S., but it gives greater emphasis in the social sciences and humanities and allows a greater breadth of subject matter.

The B.S. degree includes a foundation in the basic sciences and stronger requirements within the biological sciences than the B.A. Candidates who expect to teach in public secondary schools must be sure that they meet education requirements.

Major -- B.A. Degree

1. Complete the general university requirements. (As part of the core curriculum requirements, complete: CHEM F105X* and F106X*.)
2. Complete the B.A. degree requirements.
3. Complete the following program (major) requirements:* BIOL F115X--Fundamentals of Biology I--4 credits BIOL F116X--Fundamentals of Biology II--4 credits BIOL F261--Introduction to Cell and Molecular Biology--4 credits BIOL F271--Principles of Ecology--4 credits BIOL F303--Principles of Metabolism and Biochemistry (4) or CHEM F321--Organic Chemistry (3) and CHEM F322--Organic Chemistry (3)--4 - 6 credits BIOL F310--Animal Physiology (4) or BIOL F111X and F112X--Human Anatomy and Physiology I & II (8) or BIOL F334W--Structure and Function of Vascular Plants (4) or BIOL F342--Microbiology (4)--4 - 8 credits BIOL F362--Principles of Genetics--4 credits
BIOL F481--Principles of Evolution--4 credits
PHYS F103X--College Physics--4 credits
STAT F200X--Elementary Probability and Statistics--3 credits

4. Minimum credits required--130 credits

Major -- B.S. Degree

1. Complete the **general university requirements**. (As part of the core curriculum requirements, complete: MATH F200X* or MATH F272X*; and CHEM F105X* and F106X*.)

2. Complete the **B.S. degree requirements**. (As part of the B.S. degree requirements, complete STAT F200X* or STAT F300*. Biology foundation courses may be used toward partial fulfillment of the natural science requirement.)

3. Complete the following program (major) requirements:*

   1. Complete the following:
      BIOL F115X--Fundamentals of Biology I--4 credits
      BIOL F116X--Fundamentals of Biology II--4 credits
      BIOL F261--Introduction to Cell and Molecular Biology--4 credits
      BIOL F271--Principles of Ecology--4 credits
      BIOL F303--Principles of Metabolism and Biochemistry (4)
         or CHEM F321--Organic Chemistry (3)
         and CHEM F322--Organic Chemistry (3)--4 - 6 credits
      BIOL F310--Animal Physiology (4)
      or BIOL F111X and F112X--Human Anatomy and Physiology I & II (8)
      or BIOL F334W--Structure and Function in Vascular Plants (4)
      or BIOL F342--Microbiology (4)--4 - 8 credits
      BIOL F362--Principles of Genetics--4 credits
      BIOL F481--Principles of Evolution--4 credits
      PHYS F103X and PHYS F104X--College Physics (8)
      or PHYS F211X and PHYS F212X--General Physics--8 credits

   2. Complete biology electives**--20 credits

4. Minimum credits required--130 credits

* Students must earn a C grade (2.0) or better in each course.

** A maximum of 6 credits of independent study (course numbers ending in 97) may be applied to this requirement. Students may petition to substitute chemistry courses (up to 10 credits for the biology electives required for the B.S. degree.)

Note: A foreign language is encouraged by the department in meeting requirements of the core curriculum.

Note: Biology foundation courses may be used toward partial fulfillment of the natural science requirement for the B.S. degree with a major in biological sciences.

Note: Candidates for the bachelor of science degree in general science wishing to major in biological sciences must satisfy both the requirements of their major curriculum and those listed above for a B.A. degree with a major in biological sciences.
Minimum Requirements for Degrees: 120 credits

The biological sciences program provides a broad education and sound foundation in the basic principles of biology. Students who major in biological sciences may pursue either a B.A. or B.S. degree. The B.A. requires fewer credits in the major field than the B.S., but it gives greater emphasis in the social sciences and humanities and allows a greater breadth of subject matter.

The B.S. degree includes a foundation in the basic sciences and stronger requirements within the biological sciences than the B.A. Candidates who expect to teach in public secondary schools must be sure that they meet education requirements.

Major -- B.A. Degree

1. Complete the general university requirements. (As part of the core curriculum requirements, complete: CHEM F105X* and F106X*.)

2. Complete the B.A. degree requirements.

3. Complete the following program (major) requirements:*  
   BIOL F115X--Fundamentals of Biology I--4 credits  
   BIOL F116X--Fundamentals of Biology II--4 credits  
   BIOL F261--Introduction to Cell and Molecular Biology--4 credits  
   BIOL F271--Principles of Ecology--4 credits  
   BIOL F303--Principles of Metabolism and Biochemistry (4)  
      or CHEM F321--Organic Chemistry (3)  
      and CHEM F322--Organic Chemistry (3)--4 - 6 credits  
   BIOL F310--Animal Physiology (4)  
      or BIOL F111X and F112X--Human Anatomy and Physiology I & II (8)  
      or BIOL F334W--Structure and Function of Vascular Plants (4)  
      or BIOL F342--Microbiology (4)--4 - 8 credits  
   BIOL F362--Principles of Genetics--4 credits  
   BIOL F481--Principles of Evolution--4 credits  
   PHYS F103X--College Physics--4 credits  
   STAT F200X--Elementary Probability and Statistics--3 credits

4. Minimum credits required—120 credits

Major -- B.S. Degree

1. Complete the general university requirements. (As part of the core curriculum requirements, complete: MATH F200X* or MATH F272X*; and CHEM F105X* and F106X*.)

2. Complete the B.S. degree requirements. (As part of the B.S. degree requirements, complete STAT F200X* or STAT F300*. Biology foundation courses may be used toward partial fulfillment of the natural science requirement.)

3. Complete the following program (major) requirements:*  
   1. Complete the following:  
      BIOL F115X--Fundamentals of Biology I--4 credits
BIOL F116X--Fundamentals of Biology II--4 credits
BIOL F261--Introduction to Cell and Molecular Biology--4 credits
BIOL F271--Principles of Ecology--4 credits
BIOL F303--Principles of Metabolism and Biochemistry (4)
or CHEM F321--Organic Chemistry (3)
and CHEM F322--Organic Chemistry (3)--4 - 6 credits
BIOL F310--Animal Physiology (4)
or BIOL F111X and F112X--Human Anatomy and Physiology I & II (8)
or BIOL F334W--Structure and Function in Vascular Plants (4)
or BIOL F342--Microbiology (4)--4 - 8 credits
BIOL F362--Principles of Genetics--4 credits
BIOL F481--Principles of Evolution--4 credits
PHYS F103X and PHYS F104X--College Physics (8)
or PHYS F211X and PHYS F212X--General Physics--8 credits

2. Complete biology electives**--20 credits

4. Minimum credits required—120 credits 130 credits

* Students must earn a C grade (2.0) or better in each course.

** A maximum of 6 credits of independent study (course numbers ending in 97) may be applied to this requirement. Students may petition to substitute chemistry courses (up to 10 credits for the biology electives required for the B.S. degree.)

Note: A foreign language is encouraged by the department in meeting requirements of the core curriculum.

Note: Biology foundation courses may be used toward partial fulfillment of the natural science requirement for the B.S. degree with a major in biological sciences.

Note: Candidates for the bachelor of science degree in general science wishing to major in biological sciences must satisfy both the requirements of their major curriculum and those listed above for a B.A. degree with a major in biological sciences.

### 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>This will not have any impact on the budget, facilities/space, or faculty within the Biology and Wildlife department.</td>
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</table>

### E. IMPACTS ON PROGRAMS/DEPTS:

What programs/departments will be affected by this proposed action?
Include information on the Programs/Departments contacted (e.g., email, memo)

None – the degrees can be completed within the 120 credits as written
F. IF MAJOR CHANGE - ASSESSMENT OF THE PROGRAM:

Description of the student learning outcomes assessment process.

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.

This is part of a general push by the university to reduce the amount of time needed to complete degrees, and brings us in line with requirements for other degrees, many of which require only 120 credits. Since it does not affect what students do within the Biological Sciences degree, the main impact will be that students will be able to complete their degrees within a shorter time period.

APPROVALS:

Signature, Chair, Program/Department of: [Signature]
Date: Oct 4, 2011
Department: [Biology and Wildlife]

Signature, Chair, College/School Curriculum Council for: [Signature]
Date: Oct 11
Council: CNSM

Signature, Dean, College/School of: [Signature]
Date: Oct 24
College/School: CNSM

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

Signature, Chair, UAF Faculty Senate Curriculum Review Committee: [Signature]
Date: [ ]