FORMAT 5

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

PROGRAM/DEGREE REQUIREMENT CHANGE (MAJOR)

SUBMITTED BY:

Department	Biology & Wildlife	College/School	CNSM
Prepared by	Kris Hundertmark	Phone	474-5493
Email Contact	khundert@alaska.edu	Faculty Contact	Kris Hundertmark

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

PROGRAM IDENTIFICATION:

DEGREE PROGRAM	Wildlife Biology and Conservation
Degree Level: (i.e., Certificate, A.A., A.A.S., B.A., B.S., M.A., M.S., Ph.D.)	B.S.

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

Removing a course (WLF F410) from required course list due to loss of teaching expertise within the faculty and replacing it with an existing Biology course, BIOL F471—Population Ecology. Doing the same thing with the Wildlife Biology and Conservation minor requirements. Adding capstone requirements to the major.

NOTE: red asterisks with an underline are actually a strikethrough font and should be deleted. Also note 2 numbered superscripts that should be added.

B. CURRENT REQUIREMENTS AS IT APPEARS IN THE CATALOG:

Major -- B.S. degree

1. Complete the general university requirements. (See p. 127)

2. Complete the general education requirements.
   As part of the general education requirements complete:
   COMM F141X—Fundamentals of Oral Communication: Public Context—3 credits
   CHEM F105X—General Chemistry I—4 credits
   CHEM F106X—General Chemistry II—4 credits
   Math F251--Calculus (4)**
   or MATH F230X--Calculus Essentials with Applications (3)**--3-4 credits

3. Complete the B.S. degree requirements (page 132).
   As part of the B.S. degree requirements complete:
   BIOL F115X--Fundamentals of Biology I***--4 credits
   BIOL F116X--Fundamentals of Biology II***--4 credits
   STAT F200X--Elementary Probability and Statistics (3)***
   or STAT F300--Statistics (3)***--3 credits

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

   a. BIOL F239--Introduction to Plant Biology--4 credits
   BIOL F260--Principles of Genetics--4 credits
   BIOL F310--Animal Physiology--4 credits
   BIOL F331--Systematic Botany (4)
   or BIOL F488--Arctic Vegetation Ecology: Geobotany—3-4 credits
   BIOL F371--Principles of Ecology--4 credits
   ENGL F314W,O/2--Technical Writing (3)
   or ENGL F414W--Research Writing (3)--3 credits
   WLF F101--Survey of Wildlife Science--1.5 credits
   WLF F301--Design of Wildlife Studies--3 credits

WLF F322W--Principles and Techniques of Wildlife Management--3 credits
WLF F410--Wildlife Populations and Their Management--3 credits
WLF F460O/2--Wildlife Nutrition--4 credits

b. Complete at least one of the following:
BIOL F471--Population Ecology--3 credits
WLF F305--Wildlife Diseases--3 credits
WLF F433--Conservation Genetics--3 credits
WLF F469O--Landscape Ecology and Wildlife Habitat--3 credits

c. Complete the following:
PHYS 103X--College Physics (4)
or GEOS F101X--The Dynamics of Earth (4)
or NRM F380W--Soils and the Environment (3)--3-4 credits
STAT F401--Regression and Analysis of Variance--4 credits

d. Select 3 of the following:
WLF F420O--Ecology and Management of Birds (3)
BIOL F426W,O/2--Ornithology (3)--3 credits
WLF F421--Ecology and Management of Large Mammals (3)
BIOL F425--Mammalogy (3)--3 credits

e. Complete 2 of the following:*
NRM F204--Public Lands Law and Policy--3 credits
ECON F235--Introduction to Natural Resource Economics--3 credits
NRM F407--Environmental Law--3 credits
HIST F411--Environmental History--3 credits
PS F447--Environmental Politics--3 credits
NRM F403W,O—Environmental Decision-Making—3 credits

f. Complete at least two additional courses at the F300 level or higher (3 or 4 credits) in biology, wildlife biology, fisheries or natural resources management.*--6-8 credits

4. Minimum credits required--120 credits

* *Students 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.

Requirements for biology teachers (grades 7-12)

1. Complete all the requirements of the wildlife biology B.S. degree
2. All prospective biology teachers must complete the following:
   BIOL F342--Microbiology--4 credits
   BIOL F481--Principles of Evolution--4 credits
   CHEM F321—Organic Chemistry I—4 credits
   CHEM F325--Organic chemistry II--4 credits
3. All prospective science teachers must complete the following:
   PHIL F481--Philosophy of Science--3 credits

** We strongly recommend that prospective secondary science teachers seek advising from the UAF School of Education early in your undergraduate degree program, so that you can be appropriately advised of the State of Alaska requirements for teacher licensure. You will apply for admission to the UAF School of Education's postbaccalaureate teacher preparation program, a one-year intensive program, during your senior year. Above requirements apply to all candidates who apply to the UAF School of Education Spring 2006 or later for licensure in biology.*

Minor*

1. Complete the following:
   WLF F301--Design of Wildlife Studies--3 credits
   WLF F322 - Principles and Techniques of Wildlife Management—3 credits
   WLF F410--Wildlife Populations and Their Management--3 credits
   Approved biology and wildlife electives*--6 credits

2. Minimum credits required--15 credits

**Only biology or wildlife electives that are not required for the student's major.*

Note: Prerequisites for required courses include BIOL F115X-116X, BIOL F371, BIOL F310, STAT F200X or F300, and WLF F322W. Depending upon a student's major, some of these prerequisites may satisfy the 6 elective credits in biology and wildlife required for this minor.

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)

Major -- B.S. degree

1. Complete the general university requirements. (See p. 127)

2. Complete the general education requirements.
   As part of the general education requirements complete:
   COMM F141X—Fundamentals of Oral Communication: Public Context—3 credits
   CHEM F105X—General Chemistry I—4 credits
   CHEM F106X—General Chemistry II—4 credits
   Math F251--Calculus (4)**
   or MATH F230X--Calculus Essentials with Applications (3)**--3-4 credits

3. Complete the B.S. degree requirements (page 132).
   As part of the B.S. degree requirements complete:

   BIOL F115X--Fundamentals of Biology I***--4 credits
   BIOL F116X--Fundamentals of Biology II***--4 credits
   STAT F200X--Elementary Probability and Statistics (3)***
   or STAT F300--Statistics (3)***--3 credits

4. Complete the following program (major) requirements:[1]

a. BIOL F239--Introduction to Plant Biology--4 credits
   BIOL F260--Principles of Genetics--4 credits
   BIOL F310--Animal Physiology--4 credits
   BIOL F331--Systematic Botany (4)
   or BIOL F488--Arctic Vegetation Ecology: Geobotany (3) 3-4 credits
   BIOL F371--Principles of Ecology--4 credits
   ENGL F314W,O/2--Technical Writing (3)
   or ENGL F414W--Research Writing (3)--3 credits
   WLF F101--Survey of Wildlife Science--1.5 credits
   WLF F301--Design of Wildlife Studies[2]--3 credits
   WLF F322W--Principles and Techniques of Wildlife Management--3 credits
   ~~WLF F410--Wildlife Populations and Their Management--3 credits~~

BIOL F471—Population Ecology—3 credits

b. Complete at least one of the following:
~~BIOL F471--Population Ecology--3 credits~~
WLF F305--Wildlife Diseases--3 credits
WLF F433--Conservation Genetics--3 credits
WLF F469O--Landscape Ecology and Wildlife Habitat--3 credits
WLF F460O/2--Wildlife Nutrition--4 credits

c. Complete the following:
PHYS 103X--College Physics (4)
or GEOS F101X--The Dynamics of Earth (4)
or NRM F380W--Soils and the Environment (3)--3-4 credits
STAT F401--Regression and Analysis of Variance--4 credits

d. Complete at least three of four:
WLF F425O--Ecology and Management of Birds--3 credits
BIOL F426W,O/2--Ornithology--3 credits
WLF F421--Ecology and Management of Large Mammals--3 credits
BIOL F425--Mammalogy--3 credits

e. Complete 2 of the following:[1]
NRM F204--Public Lands Law and Policy--3 credits
ECON F235--Introduction to Natural Resource Economics--3 credits
NRM F407--Environmental Law--3 credits
HIST F411--Environmental History--3 credits
PS F447--Environmental Politics--3 credits
NRM F403W,O--Environmental Decision Making--3 credits

f. Capstone

Satisfactory completion of a capstone research project, which can be done by completing the course project for WLF 301 with either junior or senior standing.

g. Complete at least two additional courses at the F300 level or higher (3 or 4 credits) in biology, wildlife biology, fisheries or natural resources management.*--6-8 credits

4. Minimum credits required--120 credits

[1] *Students must earn a C- grade or better in each course.*

[2] *Fulfills the baccalaureate capstone requirement (junior or senior standing required)*

~~*** *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.

Requirements for biology teachers (grades 7-12)

1. Complete all the requirements of the wildlife biology B.S. degree
2. All prospective biology teachers must complete the following:
   BIOL F342--Microbiology--4 credits
   BIOL F481--Principles of Evolution--4 credits
   CHEM F321—Organic Chemistry I—4 credits
   CHEM F325--Organic Chemistry II--4 credits
3. All prospective science teachers must complete the following:
   PHIL F481--Philosophy of Science (3)--3 credits

* *We strongly recommend that prospective secondary science teachers seek advising from the UAF School of Education early in your undergraduate degree program, so that you can be appropriately advised of the State of Alaska requirements for teacher licensure. You will apply for admission to*

the UAF School of Education's postbaccalaureate teacher preparation program, a one-year intensive program, during your senior year. Above requirements apply to all candidates who apply to the UAF School of Education Spring 2006 or later for licensure in biology.

Minor

1. Complete the following:
   WLF F301--Design of Wildlife Studies--3 credits
   WLF F322W--Principles and Techniques of Wildlife Management--3 credits
   ~~WLF F410--Wildlife Populations and Their Management--3 credits~~
   BIOL F471—Population Ecology—3 credits
   Approved biology and wildlife electives*--6 credits

2. Minimum credits required--15 credits

**Only biology or wildlife electives that are not required for the student's major.*

Note: Prerequisites for required courses include BIOL F115X-116X, BIOL F371, BIOL F310, and STAT F200X or F300. Depending upon a student's major, some of these prerequisites may satisfy the 6 elective credits in biology and wildlife required for this minor.

D. ESTIMATED IMPACT

WHAT IMPACT, IF ANY, WILL THIS HAVE ON BUDGET, FACILITIES/SPACE, FACULTY, ETC.
No impact on budget, or facilities/space. Enrollment in BIOL F471 is expected to increase.

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)*
No programs/departments will be affected by this action.

F. IF MAJOR CHANGE - ASSESSMENT OF THE PROGRAM:

Description of the student learning outcomes assessment process.)
This is a relatively minor change in required courses that will not significantly affect our assessment process for student learning outcomes for the program.

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 action is being taken because we lost a faculty member who was assigned to teach Wildlife Populations and their Management (WLF F410) and she may not be replaced soon. We therefore had to remove that course from our list of required courses for the Wildlife Biology and Conservation B.S. degree and the Wildlife Biology and Conservation minor. The BS and minor programs were modified by adding Population Ecology (BIOL 471) to replace WLF F410. Moreover, our curriculum still allows our graduates to meet the academic requirements to become certified wildlife biologists by The Wildlife Society, the primary professional organization of wildlife managers, researchers, and educators. Therefore, we believe that the quality of the program is not compromised as a result of these changes. Also, we added the capstone requirements for the major.

APPROVALS: SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSION TO THE GOVERNANCE OFFICE

	Date	8/25/16
Signature, Chair, Program/Department of:	Biology and Wildlife	
	Date	8-25-16
Signature, Chair, College/School Curriculum Council for:	CNSM	
	Date	8/26/16
Signature, Dean, College/School of:	CNSM	

CHAIR SIGNATURE OBTAINED FOLLOWING APPROVAL BY FACULTY SENATE COMMITTEE

	Date	

Signature, Chair, UAF Faculty Senate
___Curriculum Review Committee

___Graduate Academic and Advisory Committee