## Curriculum Proposal

### BIOL 19-20 #20

<table>
<thead>
<tr>
<th>Packet Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 <em>Summary</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Modification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2 BIOL 3610/5610 Principles of Wildlife Management (3 credits); prerequisite change</td>
</tr>
<tr>
<td>1.4 BIOL 4510/5510 Ornithology (3 credits); prerequisite change</td>
</tr>
<tr>
<td>1.6 BIOL 4520/5520 Mammalogy (3 credits); prerequisite change</td>
</tr>
</tbody>
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<thead>
<tr>
<th>Course Add</th>
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<tbody>
<tr>
<td>1.8 BIOL 4530/5530 Ecology and Management of Large Mammals (3 credits)</td>
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<tr>
<th>Program Add</th>
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</thead>
<tbody>
<tr>
<td>1.17 Wildlife Biology minor</td>
</tr>
</tbody>
</table>

| 1.21 Signatures |
BSU Curriculum Forms

Form 1

Curriculum Modification Summary

College: Business, Mathematics, and Sciences
Department: Biology
Proposer: Elizabeth Rave
Proposer’s position: Professor

Describe the modification(s) you propose, and how it (/they) will work to students’ advantage. (This description and explanation will be included in Curriculum Report packets forwarded to the Faculty Senate.):

We propose a new minor in Wildlife Biology. The Wildlife Biology program has grown significantly over the past 10 years. Faculty from other programs, including Criminal Justice and Aquatic Biology, have expressed an interest in a Wildlife Biology minor to supplement their majors. Students have also requested the minor. Adding a minor would further enhance the background of Aquatic Biology, Fisheries, and Criminal Justice students wanting a career in the natural resources.

In addition to the minor, we propose:

- Changes in the prerequisites to BIOL 3610, BIOL 4510, and BIOL 4520 to better reflect course content.
- A new course in large mammal management to augment the course electives for Wildlife Biology students.

Modifications proposed (specify number of each):

- Course Modification(s) (form 2) 3
- New Course(s) (form 3) 1
- Course Drop(s) (form 4) __
- Program Modification(s) (form 5) __
- New Program(s) (form 6) __
- Program Drop(s) (form 7) __

The modifications affect (check):

- Liberal Education __
- Undergraduate Curriculum __
- Graduate Curriculum __
- Teacher Licensure Program(s) X
BSU Curriculum Forms

Form 2
Updated 9.19.15

Course Modification Form

Current Course Number(s):
  Undergraduate: **BIOL 3610**
  Graduate: **BIOL 5610**
Proposed Course Number(s), if different:
  Undergraduate:
  Graduate:

Current Course Title: **Principles of Wildlife Management**
Proposed Course Title, if different:

Current Course Description: **Introduction to the field of wildlife management, including the biological principles important to the understanding of wildlife populations and the management strategies implemented by natural resource managers.**
Proposed Course Description, if different:

Current Credits: **3**
Proposed Credits, if different:

Current Prerequisite(s):
  Undergraduate: **BIOL 1211, BIOL 1212, and BIOL 2610**
  Graduate: **None**
Proposed Prerequisite(s), if different:
  Undergraduate: **BIOL 1212 and BIOL 2610**
  Graduate:

1) Reason(s) for change(s): **This course does not require the information gained from BIOL 1211.**

2) May this modified course replace the current course for students remaining in the old curriculum? Yes **X** No _____ If not, please drop the current course and submit a new course form for the modification.

3) Do these modifications change any of the following? **For all Yes answers, please provide updated information on the next page.**
   - Student Learning Outcomes  Yes _____  No ____X____
   - Major Content Areas  Yes _____  No ____X____
   - Projected Maximum Class Size (Cap)  Yes _____  No ____X____
4) Current Course fee(s) per student: **Differential tuition of $15 per credit**
   for: **Providing manuscripts, field materials, and other literature for the course.**
   Proposed Course fee(s) per student, if different: $
   for:

5) Service Areas:
   This course is a requirement or an elective in the programs/areas listed below. To locate
   where this course appears please search the online catalog, as follows:
   a) go to [http://www.bemidjistate.edu/academics/catalog/](http://www.bemidjistate.edu/academics/catalog/) and choose the most recent
catalog(s),
   b) click on “Areas of Study, and Course Descriptions,”
   c) click on “PDF of Entire Catalog” in upper right,
   d) press Ctrl F, and enter the prefix and number of the course(s) from this form.

   Non-licensure programs:
   Aquatic Biology, B.S. major Wetlands Ecology Emphasis (select 6 credits of electives)
   Aquatic Biology, B.S. major Aquatic Systems Emphasis (select 9 credits of electives)
   Wildlife Biology, B.S. major (required course in major)
   Indigenous Sustainability Studies, B.S. major (select 15 credits of electives)

   Teacher Licensure programs:

   Liberal Education:

   BIOL 3610 is a prerequisite for:
   BIOL 4330 Upland Wildlife Management
   BIOL 4780 Wildlife Management Techniques

The above “service area” programs/departments were notified of this modification
on _9/10/19_ (date) by __email____________ (mail, email, or phone).

Please check one of the items below:

_____ No comments were received from other programs or departments within one
   week of the notification.

___X___ Comments were received within one week of the notification, and are attached.

*Elizabeth,*

*Thanks for the heads up.*

*Carl*

**See email at end of document.**
BSU Curriculum Forms

Form 2
Updated 9.19.15

Course Modification Form

Current Course Number(s):
   Undergraduate: **BIOL 4510**
   Graduate: **BIOL 5510**
Proposed Course Number(s), if different:
   Undergraduate:
   Graduate:

Current Course Title: **Ornithology**
Proposed Course Title, if different:

Current Course Description: **Morphology, ecology, behavior, classification, distribution, and evolution of birds. Lecture, laboratory, and field study (early morning field trips and one or two all-day field trips).**
Proposed Course Description, if different:

Current Credits: 3
Proposed Credits, if different:

Current Prerequisite(s):
   Undergraduate: **BIOL 1211 and BIOL 1212**
   Graduate: **None**
Proposed Prerequisite(s), if different:
   Undergraduate: **BIOL 1212 and BIOL 2610, or consent of instructor**
   Graduate:

1) Reason(s) for change(s): **This course does not require the information gained from BIOL 1211. Additionally, students will be better prepared for the fundamental concepts of this course by taking BIOL 2610 as a prerequisite.**

2) May this modified course replace the current course for students remaining in the old curriculum? Yes **X** No ______ If not, please drop the current course and submit a new course form for the modification.

3) Do these modifications change any of the following? **For all Yes answers, please provide updated information on the next page.**
   - Student Learning Outcomes Yes _____ No **X**
   - Major Content Areas Yes _____ No **X**
   - Projected Maximum Class Size (Cap) Yes _____ No **X**
4) Current Course fee(s) per student: Differential tuition of $15 per credit
for: Travel for field trips and supplies for lab.
Proposed Course fee(s) per student, if different: $
for:

5) Service Areas:
This course is a requirement or an elective in the programs/areas listed below. To locate
where this course appears please search the online catalog, as follows:
  a) go to http://www.bemidjistate.edu/academics/catalog/ and choose the most recent
catalog(s),
  b) click on “Areas of Study, and Course Descriptions,”
  c) click on “PDF of Entire Catalog” in upper right,
  d) press Ctrl F, and enter the prefix and number of the course(s) from this form.

Non-licensure programs:
Biology, B.A. major – N/A being removed in other proposal
Biology, B.S. major – N/A being removed in other proposal
Wildlife Biology, B.S. major (ok 1212 and 2610 in program)
Biology minor (ok 1212 and 2610 in program)

Teacher Licensure programs:
Science Education, Life Science Specialty (select 1 of 5 course options)
  – ok 1212 and 2610 in program

Liberal Education:
The above “service area” programs/departments were notified of this modification
on _9/10/19_____ (date) by ___email_____________ (mail, email, or phone).
Please check one of the items below:

______ No comments were received from other programs or departments within one
week of the notification.

___X___ Comments were received within one week of the notification, and are attached.

howdy!

hi dr rave, okey-dokey!

i will forward to aspen easterling, our licensure certification officer.

sincerely,

porter

**See email at end of document.**
BSU Curriculum Forms

Form 2
Updated 9.19.15

Course Modification Form

Current Course Number(s):
   Undergraduate: BIOL 4520
   Graduate: BIOL 5520
Proposed Course Number(s), if different:
   Undergraduate: 
   Graduate: 

Current Course Title: Mammalogy
Proposed Course Title, if different:

Current Course Description: Morphology, ecology, behavior, classification, distribution, and evolution of mammals. Lecture and laboratory.
Proposed Course Description, if different:

Current Credits: 3
Proposed Credits, if different:

Current Prerequisite(s):
   Undergraduate: BIOL 1211 and BIOL 1212
   Graduate: None
Proposed Prerequisite(s), if different:
   Undergraduate: BIOL 1212 and BIOL 2610, or consent of instructor
   Graduate: 

1) Reason(s) for change(s): This course does not require the information gained from BIOL 1211. Additionally, students will be better prepared for the fundamental concepts of this course by taking BIOL 2610 as a prerequisite.

2) May this modified course replace the current course for students remaining in the old curriculum? Yes ___X__ No ______ If not, please drop the current course and submit a new course form for the modification.

3) Do these modifications change any of the following? For all Yes answers, please provide updated information on the next page.
   Student Learning Outcomes Yes ____ No ___X__
   Major Content Areas Yes ____ No ___X__
   Projected Maximum Class Size (Cap) Yes ____ No ___X__

4) Current Course fee(s) per student: Differential tuition of $15 per credit for: Travel for field trips and supplies for lab.
Proposed Course fee(s) per student, if different: $

for:

5) Service Areas:
This course is a requirement or an elective in the programs/areas listed below. To locate where this course appears please search the online catalog, as follows:
   a) go to http://www.bemidjistate.edu/academics/catalog/ and choose the most recent catalog(s),
   b) click on “Areas of Study, and Course Descriptions,”
   c) click on “PDF of Entire Catalog” in upper right,
   d) press Ctrl F, and enter the prefix and number of the course(s) from this form.

Non-licensure programs:
Biology, B.A. major (N/A as being removed from program)
Biology, B.S. major (N/A as being removed from program)
Wildlife Biology, B.S. major – ok 1212 and 2610 options in program
Biology minor (ok 1212 and 2610 in program)

Teacher Licensure programs:
Science Education, Life Science Specialty (select 1 of 5 course options)
– ok 1212 and 2610 in program

Liberal Education:
The above “service area” programs/departments were notified of this modification on _9/10/19____ (date) by ___email____________ (mail, email, or phone).

Please check one of the items below:

______ No comments were received from other programs or departments within one week of the notification.

__X___ Comments were received within one week of the notification, and are attached.

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sincerely,

porter

**See email at end of document.**
BSU Curriculum Forms

Form 3
Updated: 9.19.15

New Course Form

Course Number:
  Undergraduate: BIOL 4530
  Graduate: BIOL 5530

Course Title: Ecology and Management of Large Mammals

Course Description:

Large mammals are socially and ecologically important components of the landscape and are intensively managed by wildlife agencies and private landowners. The primary focus of the course will be on life-histories, investigative techniques, and management of the major large mammals in Minnesota; white-tailed deer, black bear, wolves, moose, and elk. Biology, management, and research of large mammals from the western United States (i.e., mule deer, cougar, bison, pronghorn antelope, bighorn sheep, brown bear, etc.) will also be discussed. Students will be introduced to current issues concerning the political and social aspects of big game management.

Credits: 3

Prerequisite(s):
  Undergraduate: BIOL 3610 Principles of Wildlife Management
  Graduate: None

1. Reason(s) for creating this course:

This course will be an elective in the Wildlife Biology B.S. major. It will be placed under II. Required Wildlife Biology Core Courses as follows:
Complete the following courses:
BIOL 3630 Conservation Biology
or GEOG 3630 Conservation Biology
or BIOL 4330 Upland Wildlife Management
or BIOL 4530 Ecology & Management of Large Mammals

The course counts towards Associate Biologist level certification through The Wildlife Society, the primary professional association for wildlife conservation. Furthermore, there is a strong interest among students in the wildlife biology major for a course specific to the management issues pertaining to large mammals.

2. How often will this course be offered? Every fall semester
3. What are the student learning outcomes for the course (please precede each outcome with "Students will...")?

- Students will gain an understanding of the life history of white-tailed deer, black bears, and other large mammal species.
- Student will enhance their understanding of ungulate diseases, captive wildlife facilities, and current issues facing managers of big game species.
- Students will gain an appreciation and understanding of large mammals from the western United States and from outside of North America.

4. What are the major content areas for the course?

**Main Topics**

1. Introduction: taxonomy & distribution in North America
2. History of management: pre-European, overexploitation, regulation
3. Ecology, behavior, & reproduction: ungulates
4. Ecology, behavior, & reproduction: carnivores
5. Nutrition & condition
6. Predator-prey interactions
7. Estimating population parameters
8. Harvest: state/federal agency management & public trust
9. Harvest: selective harvest & intensive private management
10. Overabundance, social carrying capacity, & human conflicts
11. Climate change & disease
12. Chronic Wasting Disease: past, present, future
13. Captive breeding & reintroductions
14. Management outside of North America

5. Is this course repeatable for credit, and if so, what is the maximum number of credits that can be earned?

**Not repeatable for credit.**

6. If this course is intended primarily for off-campus delivery (not offered on campus), what delivery mechanism will be used?

**Not applicable**

7. What is the projected maximum class size (cap)?

30 (with a 26 UG and 4 G split)

8. What qualified faculty will be available to teach this course?
Dr. Jacob Haus, a new probationary tenure track hire in the Biology Department, has a relevant background and expertise in the area of large mammal ecology. He will be available to teach the course at the specified frequency without overload.

NOTE WELL: Department and dean, in approving this proposal, attest both to the adequacy of the qualifications of faculty here named, and to their availability to teach the course at the frequency specified above, without excessive overload or disruption to other curriculum.

9. What additional library and other resources need or should be provided for this course, that are not already available?

None

10. What special personal property or service fee(s) would be charged to students taking this course? These charges would be for 1) items that are retained by the student and have an educational or personal value beyond the classroom, or 2) services that are on the student’s behalf (see MnSCU Board Policy 5.11).

   Amount per student: $45

   For: BIOL differential tuition ($15/credit) for providing manuscripts, field materials, and other literature for the course.

11. Attach a sample syllabus for the course. Note: if this course is double-numbered (u-grad/grad), the syllabus must include an additional component for graduate students.
BIOL 4530/5530 ECOLOGY AND MANAGEMENT OF LARGE MAMMALS SYLLABUS - FALL 2019

Instructor: Dr. Jacob M. Haus
Office: Sattgast 218L
Phone: 218-755-4372 (office)
Email: Jacob.Haus@bemidjistate.edu (preferred contact method)
Office Hours: Anytime I’m in the office or by appointment (typically 9-5)
Lecture Time: M/W/F 3:00-3:50pm, Sattgast Hall 228 (3 credit hours)
Prerequisites: BIOL3610 Principles of Wildlife Management

Course Objectives: Large mammals are socially and ecologically important components of the landscape and are intensively managed by wildlife agencies and private landowners. The primary focus of the course will be on life-histories, investigative techniques, and management of the major large mammals in Minnesota; white-tailed deer, black bear, wolves, moose, and elk. Biology, management, and research of large mammals from the western United States (i.e., mule deer, cougar, bison, pronghorn antelope, bighorn sheep, brown bear, etc.) will also be discussed. Students will be introduced to current issues concerning the political and social aspects of big game management. Specific objectives include:

1. To gain an understanding of the life history of white-tailed deer, black bears, and other large mammal species.
2. To enhance understanding of ungulate diseases, captive wildlife facilities, and current issues facing managers of big game species.
3. To gain an appreciation and understanding of large mammals from the western United States and from outside of North America.

Work Expectation: My expectation for effort from you is typical for an upper division, 3-credit science course. Expect to put in at least 3 hours of out-of-class work for every credit each week (9 hours/week).

Text: We will not have a mandatory textbook for the class. Additional course material will be taken from the primary literature and other relevant readings. Material for lectures is structured heavily from the below textbook. Some chapters are good, some are not. 19 years out of date yet the paperback edition still costs $110. The text will be useful to supplement lectures for those who choose to do so, but the book is not required to be successful in this course.

Readings: You should complete reading assignments prior to class. The readings are meant to supplement the lecture. Some readings will provide additional details about the topic of lecture, whereas some readings will provide an alternate viewpoint. Completing the readings prior to class makes the lecture material more familiar and comprehensible, permits you to ask clarifying questions, and better enables you to answer questions. If you complete the reading assignments, you will learn more and earn a higher grade in the course. You will be tested on material found in the readings but not discussed in class. I notice who does not complete the readings, is not prepared, and does not participate. I use this information to decide if individuals with borderline grades should be elevated to the next grade level.

Conduct: You are expected to abide by Bemidji State University’s Code of Conduct for all exams and assignments particularly as it related to Academic Integrity. The policy states, “As members of this University community, students assume the responsibility to fulfill their academic obligations in a fair and honest manner. This responsibility includes avoiding inappropriate activities such as plagiarism, cheating, fabrication, unauthorized collaboration, participation in academically dishonest activities, and/or collusion. Students found responsible for one or more of these activities may face both academic sanctions (such as lowering a grade, failing of a course, etc.) and disciplinary sanctions (such as probation, suspension, or expulsion).” Violations of the Code of Conduct should be reported to Dr. Haus. I take all allegations of dishonesty seriously and those suspected of violations of the code of conduct will be reported to the Office of Student Affairs. You are expected to treat your fellow classmates, and their ideas and opinions with respect. Additionally, when I am lecturing or answering questions, you are expected to be quiet and direct questions to me, not your fellow classmates. Turn off (or switch to silent mode) your cell phone before you enter the classroom. Students that act contrary to any of these expectations will be asked to leave. I will not tolerate abrasive, disruptive, or rude behavior toward your fellow students or myself.

Attendance Policy: Attendance is mandatory and essential for exemplary performance in this class. Test content will primarily come directly from classroom lecture and assigned readings. At this point in your professional development, you should have formulated a professional work ethic, which mandates that you keep commitments and avail yourself of every learning opportunity. At the end of the semester, I will use attendance to assist with determining if those with borderline grades should be elevated to the next grade.

Exams: Exams may be multiple-choice and/or short answer. Make-up exams will not be given unless you have an emergency or illness. You must call me (leave a message) before the exam and leave a number where you can be reached (i.e., email messages are not acceptable). Proof of emergency or illness may be requested. I reserve the right not to accept undocumented excuses, delayed excuses, or self-inflicted illnesses. Make-up exams will be composed of 10 essay questions. Exams will be graded and returned as quickly as possible. Students may contest grading of individual questions but must do so in writing within one week of when graded exams are returned. I
reserve the right not to accept delayed or incomplete responses. You must clearly state why you think the answer you provided is correct and supporting documentation will be helpful.

**Research Paper:** Each student will use the primary literature to research and prepare a term paper covering an important, current conservation issue involving a large mammal species or group of large mammal species. The large mammal conservation topic will be the student’s choice but will be approved by Dr. Haus. The term paper should consolidate what is known about the large mammal conservation issue, identify the major management problems contributing to the conservation concern, critically evaluate how proposed or ongoing programs are dealing with these factors, and synthesize the information into a relatively concise research paper.

Papers should be 2000-2500 words (not including Literature Cited), with 12 point font and 2.0 line spacing. Format for references cited in the text and listed in the Literature Cited section should follow guidelines for *The Journal of Wildlife Management*.

You will not necessarily need the traditional sections of a scientific research paper (Intro, Methods, Results, Discussion, etc.); your paper may be divided into sections as you see fit. However, you must include an Abstract and Literature Cited section. In order to assess the current state of knowledge on your topic you must utilize the primary scientific literature. You should cite at least 10 primary sources from the scientific literature, including at least 5 recent (year 2005+) references (this does not include “gray literature”, book chapters, agency reports, or web sites); note that 10 primary references is the minimum but more are expected to achieve a high grade.

The research paper will be submitted mid-semester, at which point it will be graded and receive a formal peer review by another student and the instructor. Peer reviews will be returned to the author, who will then be expected to revise the paper according to the reviews and submit a final revision toward the end of the semester.

**Assignments:** Assignment will involve half page statements on readings in preparation for in-class discussions. Assignments are due at the start of the class on the due date, and will be penalized 50% if received in the afternoon or evening of the due date. No assignments will be accepted after the due date, unless I accept a catastrophic reason in advance.

**Grading:**

<table>
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<th>Component</th>
<th>Points</th>
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<tbody>
<tr>
<td>Attendance and Participation</td>
<td>50 pts</td>
</tr>
<tr>
<td>City of Bemidji Spotlight Surveys (x2 nights)</td>
<td>50 pts</td>
</tr>
<tr>
<td>Assignments (10 × 10pts)</td>
<td>100 pts</td>
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<tr>
<td>Midterm Exam</td>
<td>150 pts</td>
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<tr>
<td>Research Paper (including peer review)</td>
<td>200 pts</td>
</tr>
<tr>
<td>Final Exam</td>
<td>200 pts</td>
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<tr>
<td>TOTAL</td>
<td>750 pts</td>
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Grading Policy:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>93-100%</td>
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<tr>
<td>A-</td>
<td>90-92%</td>
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<tr>
<td>B+</td>
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<td>D-</td>
<td>60-62%</td>
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<tr>
<td>F</td>
<td>&lt;60%</td>
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Graduate Student Requirements: Graduate students will receive separate exams, which will be essay format. They will have more rigorous requirements for the research paper, which will be discussed with the instructor in-person.

Students with Special Needs: BSU is committed to making all educational programs, course materials, services and activities sponsored by the University accessible to individuals with disabilities. Students requesting accommodations due to a disability or other need for access should contact Accessibility Services as soon as possible. Accessibility Services is located at Decker Hall 202. PH: 218-755-3883 or email: accessibility@bemidji.edu. This information is also available through Minnesota Relay Services at 800-627-3529. I must receive an accommodation email from Accessibility Services before I will permit any accommodations. To prevent any problems (i.e., me not receiving the email), students with accommodations should meet with me during the first two weeks of courses. The meeting will permit us to discuss accommodations and allow me to provide my expectations of those receiving accommodations.

Tutoring Availability: BSU is committed to assisting our students in their academic endeavors and has in place the Advising Success Center as a valuable resource: https://www.bemidji.edu/services/advising-success-center/services/tutoring/ The Advising Success Center is a great place to improve your academic skills and excel in your classes. The center is in Decker Hall 202. Tutor.com: The Minnesota State system has updated the online tutoring service available to our students. We are now partnering with Tutor.com to offer 24/7 online tutoring, which will connect students with an expert tutor for extra assistance one-on-one. Online tutoring services can be accessed through the main page in D2L and your course page, by clicking on the tutor.com link, located in the “HelpLinks” menu. All students receive 15 hours of tutoring at no cost. Tutoring services cover a variety of subject areas including math, writing, accounting, economics, biology, languages and nursing. Additional time may be purchased by students directly through tutor.com.

Extended Leave Procedure: If student must be away from class from an extended period of time (more than two class sessions) for medical emergencies or a funeral, you are asked to contact the Student Life and Success Office where a leave notice will be given to your faculty. This notice informs the faculty of your departure and return date back to campus. This leave does not absolve you from any assignment you have due during your leave. You are to make arrangements with your instructors of when to
complete any assignments due during the leave period. You can complete a leave form as this website https://www.bemidjistate.edu/offices/student-life-success/extended-absence/

**Mental Health and Counseling:** Students may experience mental health concerns or stressful events that may lead to diminished academic performance. The Student Center for Health & Counseling is available to assist you with concerns and can include stress relief services. They can be reached in Cedar Hall, First Floor. PH:218-755-2053.

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Reading</th>
<th>Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>26-Aug</td>
<td>Introduction</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>28-Aug</td>
<td>Taxonomy &amp; distribution in North America</td>
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<tr>
<td></td>
<td>30-Aug</td>
<td>Taxonomy &amp; distribution in North America</td>
<td>Donlan et al. 2006</td>
<td></td>
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<tr>
<td>2</td>
<td>2-Sep</td>
<td>NO CLASS - Labor Day</td>
<td></td>
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<tr>
<td></td>
<td>4-Sep</td>
<td>History of management: pre-European, overexploitation, regulation</td>
<td>Donlan discussion</td>
<td></td>
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<tr>
<td></td>
<td>6-Sep</td>
<td>History of management: pre-European, overexploitation, regulation</td>
<td></td>
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<tr>
<td>3</td>
<td>9-Sep</td>
<td>Ecology, behavior, &amp; reproduction: ungulates</td>
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<tr>
<td></td>
<td>11-Sep</td>
<td>Ecology, behavior, &amp; reproduction: ungulates</td>
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<td>Ecology, behavior, &amp; reproduction: carnivores</td>
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<td>Ecology, behavior, &amp; reproduction: carnivores</td>
<td>Mech discussion</td>
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<td></td>
<td>23-Sep</td>
<td>Nutrition &amp; condition</td>
<td>Therrien et al. 2008</td>
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<td>25-Sep</td>
<td>Nutrition &amp; condition</td>
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<td>Nutrition &amp; condition</td>
<td>Therrien discussion</td>
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<td>NO CLASS - Dr. Haus at TWS</td>
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<td>NO CLASS - Dr. Haus at TWS</td>
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<td>4-Oct</td>
<td>NO CLASS - Dr. Haus at TWS</td>
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<td>7-Oct</td>
<td>Predator-prey interactions</td>
<td>Kautz et al. 2019</td>
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<td>9-Oct</td>
<td>Predator-prey interactions</td>
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<td>11-Oct</td>
<td>MIDTERM EXAM</td>
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<td>14-Oct</td>
<td>Estimating population parameters</td>
<td>Haus et al. 2019</td>
<td>Kautz discussion</td>
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<td>16-Oct</td>
<td>Estimating population parameters</td>
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<td>18-Oct</td>
<td>NO CLASS - Service Day</td>
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<td>21-Oct</td>
<td>Harvest: state/federal agency management &amp; public trust</td>
<td>Strickland et al. 2001</td>
<td>Haus discussion</td>
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<td>23-Oct</td>
<td>Harvest: state/federal agency management &amp; public trust</td>
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<td>25-Oct</td>
<td>Harvest: state/federal agency management &amp; public trust</td>
<td>Strickland discussion</td>
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<td>28-Oct</td>
<td>Harvest: selective harvest &amp; intensive private management</td>
<td>Bowman et al. 2007</td>
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<td>Harvest: selective harvest &amp; intensive private management</td>
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<td>1-Nov</td>
<td>Harvest: selective harvest &amp; intensive private management</td>
<td>Bowman discussion</td>
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<td>11-4-Nov</td>
<td>Overabundance, social carrying capacity, &amp; human conflicts</td>
<td>Rudolph et al. 2000</td>
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<td>6-Nov</td>
<td>Overabundance, social carrying capacity, &amp; human conflicts</td>
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<td>8-Nov</td>
<td>Overabundance, social carrying capacity, &amp; human conflicts</td>
<td>Rudolph discussion</td>
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<td>12-11-Nov</td>
<td>NO CLASS - Veteran’s Day</td>
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<td>13-Nov</td>
<td>Climate change &amp; disease</td>
<td>Weiskopf et al. 2019</td>
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<td>15-Nov</td>
<td>Climate change &amp; disease</td>
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<td>13-18-Nov</td>
<td>Chronic Wasting Disease: past, present, future</td>
<td>Manjerovic et al. 2013</td>
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<td>20-Nov</td>
<td>Chronic Wasting Disease: past, present, future</td>
<td>Weiskopf discussion</td>
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<td>Chronic Wasting Disease: past, present, future</td>
<td>Manjerovic discussion</td>
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<td>14-25-Nov</td>
<td>Captive breeding &amp; reintroductions</td>
<td>Paper review due</td>
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<td>27-Nov</td>
<td>NO CLASS - Thanksgiving break</td>
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<td>29-Nov</td>
<td>NO CLASS - Thanksgiving break</td>
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<td>15-2-Dec</td>
<td>Captive breeding &amp; reintroductions</td>
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<td>4-Dec</td>
<td>Management outside of North America</td>
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<td>6-Dec</td>
<td>Management outside of North America</td>
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<td>16-9-Dec</td>
<td>Management outside of North America</td>
<td>Final paper due</td>
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<td>11-Dec</td>
<td>NO CLASS - Reading day</td>
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<td>TBA</td>
<td>FINAL EXAM</td>
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**Disclaimer:** I reserve the right to make changes to the policies, procedures, and schedule outlined in this syllabus as necessary. Changes will be announced in class and you are responsible for knowing about changes. The most up to date syllabus will always be available on D2L.

Upon request this document can be made available in alternate formats.
Please contact Accessibility Services (218-755-3883)
BSU Curriculum Forms

Form 6
(Updated: 9.15.15)

New Program Form

Type of Program to be established:
_____M.S.*
_____M.A.*
_____Applied Masters**
_____B.S.
_____B.S./T.L.
_____B.A.
__X_Minor
_____Field of Emphasis: Stand Alone
_____Field of Emphasis in:
_____Other:

Program name: **Wildlife Biology**

Reason(s) for new program: The Wildlife Biology program has grown significantly over the past 10 years. Faculty from other programs, including Criminal Justice and Aquatic Biology, have expressed an interest in a Wildlife Biology minor to supplement their majors. Students have also requested the minor. Adding a minor would further enhance the background of Aquatic Biology, Fisheries, and Criminal Justice students wanting a career in the natural resources.

Student learning outcomes for the program (please use the same format as for other programs in the department):

1. Evaluate ecological relationships among organisms and between organisms and the environment.

2. Identify the taxonomy of birds and mammals from the region.

3. Evaluate the life history characteristics of regional biota.

4. Evaluate wildlife management principles.

How will the student learning outcomes be assessed (e.g., major field test, student portfolio, departmental rubric, department-developed examination questions, etc.)?

Student learning outcomes will be assessed using department-developed examination questions.
Note: If courses from other departments are required for this program, please notify the chairs of those departments.

The home department/program was notified that this new program will require courses from their area: _9/5/19_____ (date) by ___ email ______ (mail, email, or phone).

Please check one of the items below:

____ No comments were received from other programs or departments within one week of the notification.

___X__ Comments were received within one week of the notification, and are attached.

Great, thanks.

Dr. Patrick Donnay  
Department of Political Science  
Box 27, Satfgast Hall  
1500 Birchmont Drive, NE  
Bemidji State University  
218 755 3899

**See email at end of document.**

Note: If this is a joint program, the signatures of both department chairs (and both deans, if different colleges) must be provided.

Alerts:
- Attach draft catalog copy of proposed program.
- Contact the Assistant Vice-President for Academic Affairs regarding approval downstate (required for all of the above except for a minor where there is an existing major).

* MS/MA Curriculum proposals for graduate programs must indicate how the program addresses these requirements (in the draft catalog copy or elsewhere):

a. MnSCU 50% rule: At least one-half of the required credits in a master's degree, exclusive of a thesis, capstone, or similar culminating project, shall be credits restricted exclusively to graduate student enrollment.

b. Competency Requirement
c. Written Examination Requirement

**Applied Master’s Degree must address items a-c above, as well as:

d. How the proposed capstone experience meets the capstone requirements/standards listed in the catalog.

For more information on each of these requirements refer to the current graduate catalog.
Wildlife Biology minor

Required Credits: 24
Required GPA: 2.25

I REQUIRED BIOLOGY CORE COURSES

Complete the following courses:

- BIOL 1212 Diversity of Life (4 credits)
- BIOL 2610 General Ecology (3 credits)

II REQUIRED WILDLIFE BIOLOGY CORE COURSES

Complete the following courses:

- BIOL 3610 Principles of Wildlife Management (3 credits)
- BIOL 4510 Ornithology (3 credits)
- BIOL 4520 Mammalogy (3 credits)

Select one of the following courses:

- BIOL 3170 Dendrology (2 credits)
- BIOL 3730 Plant Diversity (4 credits)
- BIOL 3830 Aquatic Plants & Algae (4 credits)

Select one of the following courses:

- BIOL 3630 Conservation Biology (3 credits)
  or GEOG 3630 Conservation Biology (3 credits)
- BIOL 4330 Upland Wildlife Management (3 credits)
- BIOL 4530 Ecology & Management of Large Mammals (3 credits)

Select one of the following courses:

- BIOL 3400 Fish & Wildlife Law and Administration (3 credits)
- BIOL 3420 Human Dimensions of Wildlife and Fisheries Management (3 credits)
- POL 3230 Environmental Politics (3 credits)
- ENVR 3600 Environmental Justice and Sustainability (3 credits)
- ENVR 4210 Environmental Law and Policy (3 credits)
BSU Curriculum Forms

Form 8
Updated: 09.18.15

Signatures

_Elizabeth Rave / Professor / 9.17.19_____________________________________
Proposer / Title / Date

_Mark Wallert / Biology / 9.18.19________________________________________
Chair or Director / Department or Program / Date
Note: "All departmental recommendations [on curriculum] must be reviewed and approved by the department's faculty."--IFO/MnSCU Master Agreement 2009-2011, 20.A.3 (p. 80).

At this point, packet goes to Records Office/Curriculum Coordinator to be logged in to the Curriculum Proposal Progress Grid.

__Marilyn Yoder / Business, Mathematics and Sciences / 9.19.19____________
Dean / College / Date

Note: If proposal is sent back to the Proposer, please notify the Curriculum Coordinator. If approved, packet goes to Academic Affairs Office.