Syllabus:
WILD 180 - Careers in Wildlife Biology
Fall 2016 – 2 Credits

Instructors:

Dr. Chad Bishop, FOR 312, Phone: 243-4374, Email: chad.bishop@umontana.edu
Office Hours are Wed 1:30 PM - 3:30 PM, or by appointment

Kristin Barker (TA), Natural Sciences 312, Email: kristin.barker@umontana.edu
Office Hours are Tues 1:30 PM – 3:30 PM

Lecture times and location:
10:00 AM – 10:50 AM – Tuesday (T) and Thursday (R) – Social Science (ss) 356

Course Objectives:
1. Learn about the wildlife biology profession and associated career opportunities.
2. Develop a basic understanding of:
   a. the historical origins and development of wildlife management and conservation in North America and how it ties to other natural resource professions;
   b. fundamental concepts underlying wildlife biology, management, and conservation;
   c. techniques used in wildlife research and management; and
   d. future challenges and opportunities in wildlife and natural resource conservation.

Course Website:
MOODLE UM Online. There is an online Moodle 101 course to assist you in learning the basics of navigating and using Moodle.

Readings

- Required
  - Textbook – A Sand County Almanac by Aldo Leopold.
  - Readings as assigned on the course Moodle website.
    Students are expected to have read the readings in advance of the specified lecture.

- Recommended
  - Essential Readings in Wildlife Management and Conservation by Paul Krausman and Bruce Leopold

- Suggested
  - Wolf Wars by Hank Fisher
  - Man and Nature by George Perkins Marsh
  - Silent Spring by Rachel Carson
  - The Population Bomb by Paul Ehrlich
  - The Tragedy of the Commons by Garret Hardin
  - The Diversity of Life by E.O. Wilson
Lecture Schedule:
The course is structured with presentations by the instructor, teaching assistant, and guest speakers presenting information on their areas of expertise. Lectures are not recorded. Instructor Powerpoint presentations will generally be available through the course website after a lecture has been delivered. The availability of any guest lecture handouts or Powerpoint presentations is at the sole discretion of the lecturer. Students who miss a lecture should work with fellow students, the instructor and teaching assistant about the materials they missed.

The below table is the tentative schedule for this course. Topics are subject to change.

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>30 August</td>
<td>Course Overview, Introductory Lecture</td>
</tr>
<tr>
<td>1 September</td>
<td>Historical Development of Wildlife Management and Conservation in North America</td>
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<td>6 September</td>
<td>Establishment of the Wildlife Management Profession and the Environmental Movement in North America</td>
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<td>8 September</td>
<td>A Sand County Almanac – Key concepts and historical significance</td>
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<tr>
<td>13 September</td>
<td>Present-day Wildlife and Natural Resource Issues</td>
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<tr>
<td>15 September</td>
<td>Careers in Wildlife Biology</td>
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<td></td>
<td>Assignment 1 Due</td>
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<tr>
<td>20 September</td>
<td>Connecting Careers in Wildlife with other Natural Resource Professions</td>
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<td>22 September</td>
<td>Conserving and Managing Wildlife and Natural Resources</td>
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<tr>
<td>27 September</td>
<td>Roles and Structures of State and Federal Wildlife Agencies and NGO’s</td>
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<tr>
<td>29 September</td>
<td>Tie Up Loose Ends and Exam 1 Review</td>
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<td></td>
<td>Assignment 2 Due</td>
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<tr>
<td>4 October</td>
<td>Exam 1</td>
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<tr>
<td>6 October</td>
<td>Exam 1 Review</td>
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<tr>
<td></td>
<td>Capture &amp; Monitoring Techniques used to Study and Manage Wildlife</td>
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<tr>
<td>11 October</td>
<td>Capture &amp; Monitoring Techniques used to Study and Manage Wildlife</td>
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<tr>
<td>13 October</td>
<td>Kristin Barker: Sapphire Elk – Habitat Use and Forage Availability/Quality</td>
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<tr>
<td>18 October</td>
<td>Guest Lecture</td>
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</tbody>
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20 October  Guest Lecture

25 October  Key Concepts for Managing and Conserving Wildlife Populations
   • Population Rate of Change, Carrying Capacity, Density Dependence, Limitation

27 October  Applying Key Concepts: Management of Harvested Species

1 November  Applying Key Concepts: Conservation of At-Risk Species

3 November  Tie up Loose Ends and Exam 2 Review
   Assignment 3 Due

8 November  NO CLASS – Election Day

10 November  Exam 2

15 November  ESA Overview and Contemporary Issues
   ESSAYS DUE!

17 November  Guest Lecture

22 November  Walking the Fine Line: Science vs Advocacy

24 November  NO CLASS - Thanksgiving

29 November  Guest Lecture

1 December  Future Conservation Challenges
   Assignment 4 Due

6 December  Motivations to Pursue a Career in Wildlife

8 December  Course Wrap-up and Review for Final Exam

13 December  NO CLASS – UM Study/Reading Day

20 December  FINAL EXAM – 10:10 AM – 12:10 PM

Exams:
Two midterm exams (October 4 and November 10) and a Final exam (December 20).

The exams will be multiple choice and true-false. Students are required to supply their own scantron form for each exam. Exams will focus heavily on course material presented in lectures, but may also include material associated with assignments, assigned readings, and on the course Moodle website. Exam 1 (Oct 4) will cover course material from the beginning of the course through the end of
September. Exam 2 (Nov 10) will cover course material from October 6 through November 3. The Final exam will be cumulative, covering course material presented throughout the entire course, but it will be weighted toward the material covered after November 10 (i.e., after the 2\textsuperscript{nd} exam).

Time for midterm exams will be allotted as the regular course time, 10:00 AM – 10:50 AM. Students arriving at a scheduled exam (both midterms and final) AFTER the first person to finish the exam has left the room will not be allowed to take the exam and will be assigned a ZERO.

**Make-up exams will be scheduled only when the professor is given documentation of a valid excused absence (see “Attendance Policy” below) prior to the scheduled exam time.**

**Assignments:**
There will be four assignments made throughout the course to enhance your learning of the course material. Assignments will be emailed to students, announced in class, and simultaneously posted on Moodle. **You will be expected to complete the assignments outside of class and submit them on Moodle or via email to the instructors on or before the assigned due date. Assignments turned in within 1 week after the due date will be deducted 50%. Assignments will not be accepted >1 week past the due date.** Each assignment is worth 2.5% of your grade in the course; collectively, the assignments are worth 10% of your overall grade in the course. The four assignment descriptions and due dates are:

- Assignment 1: Historic events and people in wildlife management/conservation – **Due September 15**
- Assignment 2: Temporary and permanent jobs in wildlife biology – **Due September 29**
- Assignment 3: Key concepts – Managing and conserving wildlife – **Due November 3**
- Assignment 4: ESA, NEPA, and Conservation Easements – **Due December 1**

**Essay:**
All students are required to read A Sand County Almanac. As you read it, think about your personal connection to wildlife and natural resources and what brought you here to UM to pursue your selected major. You are required to write a 2–3 page essay on this connection. It can be about a single incident in your life or it can be a summary of life experiences that drew you to this point in time. The essay can and should be very personal. It’s our personal connections and foundations that ultimately make a career in wildlife biology or natural resource conservation so rewarding. In composing your essay, you must make reference to at least 2 passages from A Sand County Almanac that resonate with you and tie to your connection. You are encouraged to seek out the services of the UM Writing Center for assistance in writing your essay (UM Writing Center).

**Your essay is due no later than November 15, although you can turn it in early.**

**Essay Grading:** All students who complete a 2-3 page essay as described above with proper grammar, punctuation, and spelling will receive full credit (15% of your total grade). Grades will be deducted accordingly for poor grammar and misspelled words, failure to reference at least 2 passages from A Sand County Almanac, and/or a failure to describe a personal connection to wildlife and natural resources.
Course Grade:
This class is offered for traditional letter grade only (A, A-, B+, B, B-, C+, C, C-, D+, D, D-, F).
Your grade will be determined based on the following weighting of exams, assignments, and the essay:

<table>
<thead>
<tr>
<th>Description</th>
<th>%</th>
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<tbody>
<tr>
<td>Exam 1</td>
<td>20%</td>
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<tr>
<td>Exam 2</td>
<td>20%</td>
</tr>
<tr>
<td>Assignments</td>
<td>10%</td>
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<tr>
<td>Essay</td>
<td>15%</td>
</tr>
<tr>
<td>Final</td>
<td>35%</td>
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<tr>
<td>Overall Grade</td>
<td>100%</td>
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General Course Policies

Attendance Policy:
Students are expected to attend all class meetings. However, attendance is not mandatory; your desire to learn and do well in the course will dictate your presence. Students are individually responsible for all information presented in lectures, guest lectures, assigned readings, on the course Moodle website, and related to class assignments. No make-up exams will be scheduled. In the case of medical or other emergencies (e.g., legitimate, planned absences) I will work with the student individually in terms of rescheduling exam times. Formal documentation will be required for legitimate emergencies that require a student to miss an exam.

Academic Dishonesty:
All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. All students need to be familiar with the Student Conduct Code.

Students with Disabilities:
The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and Disability Services for Students (DSS). If you think you may have a disability adversely affecting your academic performance, and you have not already registered with DSS, please contact DSS in Lommason 154 or 406.243.2243. I will work with you and DSS to provide an appropriate modification.
**Dropping/Adding:**
Drop/Add dates are posted at [Office of Registrar: Calendar](#).

**Important Dates Restricting Opportunities to Drop a Course during Autumn 2016 Semester:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Date Range</th>
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<tbody>
<tr>
<td>To 15th instructional day</td>
<td>Students can drop classes on Cyberbear with refund</td>
<td>August 29 to September 19</td>
</tr>
<tr>
<td>16th to 45th instructional day</td>
<td>Drop requires form with instructor and advisor signature, a $10 fee from registrar’s office, student will receive a ‘W’ on transcript, no refund.</td>
<td>September 20 to October 31</td>
</tr>
<tr>
<td>Beginning 46th instructional day</td>
<td>Students are only allowed to drop a class under very limited and unusual circumstances. Concern over course grade is not an acceptable reason. Requests to drop must be signed by the instructor, advisor, and Associate Dean and a $10 fee applies. A WP or WF will appear on the student’s transcript.</td>
<td>November 1 to December 12</td>
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