Syllabus:
WILD 180 - Careers in Wildlife Biology
Fall 2017 – 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

James Goerz (TA), Natural Sciences 312, Phone: 406-552-3487, Email: james.goerz@umontana.edu
Office Hours are Tuesday and Friday 11:00 AM – 12:00 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. When you log-in to Moodle, you will be able to find and access our course website (WILD 180 – Careers in Wildlife Biology). There is an online Moodle 101 course to assist you in learning the basics of navigating and using Moodle.

Text Book/Readings:
• Required
  o Textbook – *A Sand County Almanac and Sketches Here and There* by Aldo Leopold.
    ▪ You can purchase book through the bookstore or online
  o Readings as assigned on the course Moodle website during the semester.
• Recommended but not required for the class
  o *Essential Readings in Wildlife Management and Conservation* by Paul Krausman and Bruce Leopold
• Suggest you read at some point during your education
  o *Wolf Wars* by Hank Fischer
  o *Man and Nature* by George Perkins Marsh
  o *Silent Spring* by Rachel Carson
  o *The Tragedy of the Commons* by Garret Hardin
  o *The Diversity of Life* by E.O. Wilson
Use of TOP HAT Web-based Interactive Learning Resource:
All students are required to purchase a subscription to TOP HAT for this course. The cost of a subscription for one semester is $26. Top Hat is a web-based resource to facilitate interaction during lecture. We will also use Top Hat to track attendance and class participation. You can link to this particular course in Top Hat using the following course code: 462721. To use Top Hat during class, you will need a smart phone, tablet, laptop or similar device so you can pull up the website during class. If you do not have one of these devices, please contact one of the instructors.

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 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>Topics</th>
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<tbody>
<tr>
<td>31 August</td>
<td>Course Overview, Introductory Lecture</td>
</tr>
<tr>
<td>5 September</td>
<td>Historical Development of Wildlife Management and Conservation in North America</td>
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<tr>
<td>7 September</td>
<td>Establishment of the Wildlife Management Profession and the Environmental Movement in North America</td>
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<tr>
<td>12 September</td>
<td>A Sand County Almanac and Sketches Here and There – Part I</td>
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<td>14 September</td>
<td>A Sand County Almanac and Sketches Here and There – Part II</td>
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<td>19 September</td>
<td>Present-day Wildlife and Natural Resource Issues</td>
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<td>21 September</td>
<td>Careers in Wildlife Biology</td>
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<td>26 September</td>
<td>Tom Bansak, Flathead Lake Biological Station</td>
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<td>Assignment 1 Due</td>
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<td>28 September</td>
<td>Connecting Careers in Wildlife with other Natural Resource Professions</td>
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<tr>
<td>3 October</td>
<td>Tie Up Loose Ends and Exam 1 Overview</td>
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<tr>
<td>5 October</td>
<td>Exam 1</td>
</tr>
<tr>
<td>10 October</td>
<td>Conserving and Managing Wildlife and Natural Resources – Who does what?</td>
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</tbody>
</table>
(Include brief review of Exam 1 at start of lecture)

12 October  Roles and Structures of State and Federal Wildlife Agencies and NGO’s
17 October  Capture & Monitoring Techniques used to Study and Manage Wildlife
19 October  Dr. Erick Greene, Osprey Project: ecotoxicology, education, and conservation
24 October  Hilary Cooley or Jennifer Fortin-Noreus, Grizzly Bear Recovery Program
26 October  Key Concepts for Managing and Conserving Wildlife Populations
            • Population Rate of Change, Carrying Capacity, Density Dependence, Limitation
            Assignment 2 Due

31 October  Applying Key Concepts: Management of Harvested Species
2 November   Applying Key Concepts: Conservation of At-Risk Species
7 November   Tie up Loose Ends and Exam 2 Overview
9 November   Exam 2
14 November  ESA Overview and Contemporary Issues
            (Include brief review of Exam 2 at start of lecture)
            ESSAYS DUE!
16 November  Guest Lecture
21 November  Walking the Fine Line: Science vs Advocacy
23 November  NO CLASS - Thanksgiving
28 November  Ronald Pierce, Fisheries Biologist with Montana Fish, Wildlife and Parks
30 November  Guest Lecture
5 December   Future Conservation Challenges
            Assignment 3 Due

7 December   Motivations to Pursue a Career in Wildlife
12 December  Course Wrap-up and Review for Final Exam

15 December  FINAL EXAM – 10:10 AM – 12:10 PM
**Exams:** Two midterm exams (October 5 and November 9) and a Final exam (December 15).

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 5) will cover course material from the beginning of the course through October 3 (i.e., all material covered in the class thus far). Exam 2 (Nov 9) will cover course material from October 10 through November 7 (i.e., all material covered in the class after the first exam). The Final exam (Dec 15) will be cumulative, covering course material presented throughout the entire course, but it will be weighted toward the material covered after November 9 (i.e., after the 2nd exam). Specifically, one-half of the final exam will focus on material covered from the beginning of the course through November 7, and the other half of the final exam will focus on material covered after November 9.

Time allotted for the first and second exams will be the same as the regular course time, 10:00 AM – 10:50 AM, and the exams will be given in the same room (SS 356). Students will have up to 2 hours to take the final exam. Students arriving at a scheduled exam (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. 
*So don’t oversleep or be late for any other reason!*

**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 three 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 through Moodle on or before the assigned due date. In the event you encounter a problem uploading your assignment to Moodle, you may email the assignment to the instructors. 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 3.33% of your grade in the course, or collectively, the assignments are worth 10% of your overall grade in the course. The three assignment descriptions and due dates are:

Assignment 1: Historic events and people in wildlife management/conservation – **Due September 26**
Assignment 2: Temporary and permanent jobs in wildlife biology – **Due October 26**
Assignment 3: Key concepts: carrying capacity – **Due December 5**

**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 14, although you can turn it in early. You should turn in your essay via Moodle.

**Essay Grading:** The essay is worth 10% of your overall grade in the course. Your essay will be graded according to how well it adheres to the requirements outlined above: 1) 2-3 pages in length, 2) references at least 2 passages from A Sand County Almanac, and 3) describes a meaningful personal connection to wildlife or natural resources. Essays will be further graded based on grammar, punctuation, spelling, and sentence structure. Students who complete a 2-3 page essay as described above with proper grammar, punctuation, sentence structure, and spelling will receive an A (≥90 %). Grades will be deducted accordingly for incorrect grammar and punctuation, misspelled words, poor sentence structure, failure to reference at least 2 passages from A Sand County Almanac, failure to meet 2-3 page length requirement, and/or a failure to describe a personal connection to wildlife or 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>
</tr>
<tr>
<td>Exam 2</td>
<td>20%</td>
</tr>
<tr>
<td>Assignments</td>
<td>10%</td>
</tr>
<tr>
<td>Essay</td>
<td>10%</td>
</tr>
<tr>
<td>Class participation</td>
<td>5%</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. Also note above that 5% of your grade will be tied to class attendance. Students are individually responsible for all information presented in lectures, guest lectures, assigned readings, on the course Moodle website, and class assignments. It is especially important that you are present for exams. In the case of medical or other emergencies (e.g., legitimate,
planned absences), I will work with the student individually in terms of rescheduling an exam time. 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](#). Plagiarism qualifies as academic misconduct. Students often misunderstand plagiarism, particularly when reporting information from the web or other digital sources. Anytime you extract information from another source for an assignment or paper, it is critical that you cite your source. If you report text verbatim, you must place the text in quotes and cite the source accordingly. We are less concerned with the format of your citations at this point than the fact that you attempt to appropriately reference the source.

**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 have a disability that may adversely affect your academic performance, and you have not already registered with DSS, please contact DSS in Lommason 154 or call them at 406.243.2243. We 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 Regarding Opportunities to Drop a Course during Autumn 2017 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 31 to September 21</td>
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<tr>
<td>16th to 45th instructional day</td>
<td>Drop requires form with instructor and advisor signatures, and there is a $10 fee; student will receive a ‘W’ on transcript and no refund.</td>
<td>September 22 to November 2</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 Dean and a $10 fee applies. A WP or WF will appear on the student’s transcript.</td>
<td>November 3 to December 12</td>
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