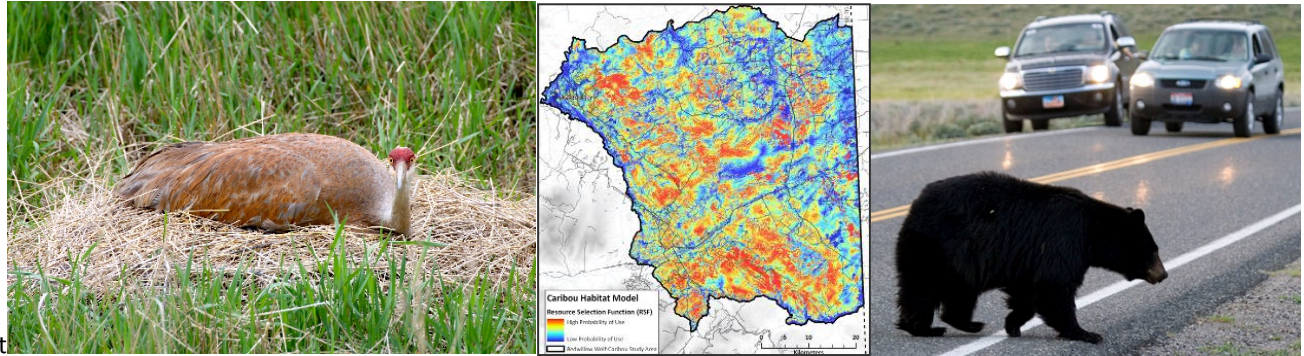


Syllabus:

WILD370 Wildlife Habitat Conservation & Management

Fall 2017 – 4 Credits



Dr. Victoria Dreitz, FOR 312A, Phone: 243-5476, Email: Victoria.Dreitz@umontana.edu
Office Hours: Thursday 12:30 PM -2 PM or by appt.

Hans Martin, Stone Hall 108, Email: hans.martin@umontana.edu
Office Hours: Tuesday 9:00-10:00 AM or by appointment

Lecture times: 11 AM – 12:20 PM Tuesday and Thursday (CHEM 102)

Final exam: 10:10 AM -12:10 PM, Monday, December 18, 2017. *Note: final exam times are YOUR responsibility to confirm and conflicts need to be taken into account during registration. If you have a conflict, it is your responsibility to change your schedule or talk to professors early. No extra exams will be scheduled to accommodate conflicts after the last drop date. See: [Final exam schedule from the Registrar](#)*

Prerequisites:

Ecology (BIOE 370/371) prior, *not concurrent*; Statistics (STAT 216/WILD 240); or approval by instructor. Additionally, students must have senior or junior level standing in Wildlife Biology.

Laboratory (field trips) times:

1 PM - ~ 5 PM Tues on specified dates in the semester. Three to four field trips (going off campus) are planned on Tues during class and/or lab time (BE AWARE some may go later!!!) on specific dates during the semester. If you cannot attend these field trips, students should consider taking WILD 370 at another time.

Course Objectives:

To gain a familiarity with the theoretical underpinnings of the importance of habitat to wildlife species in terrestrial ecosystems, and to gain proficiency with the application of this theoretical basis to wildlife habitat conservation issues. Students will gain familiarity with wildlife habitat study design, data collection, and statistical modeling of wildlife habitat. Practical hands on experience will be gained on field trips and course activities (primarily during laboratory hours) where students will be expected to be able to apply theories to practical conservation issues.

Required Readings/pre-class activities:

Assigned readings from textbooks, scientific papers, and other materials will be posted on Moodle PRIOR to class – students are expected to have completed the readings and/or assignments and be prepared to discuss them in class. Some class topics will follow a flipped classroom style in which *you must prepare prior to class* to actively participate.

Course Website:

MOODLE [UMOnline \(http://umonline.umt.edu/\)](http://umonline.umt.edu/). If you have not used Moodle in prior courses, there is 'Moodle 101 for Students' tutorial that can assist you in learning the basics. You need to login to Moodle to access this tutorial.

Grading:

Please note, this class is offered for traditional letter grade only, it is not offered under the credit/no credit option.

Tentative grading, subject to change

Category	Description	Marks	%
<u>Exams</u>	Midterm 1	100	21.74%
	Final Exam	100	21.74%
<u>Assignment</u>	Definition	20	4.35%
	Participation in UM Seminars	20	4.35%
<u>Wildlife Habitat Study</u>	Data Collection	20	4.35%
	Data Analysis	20	4.35%
	White Paper	20	4.35%
	Grant Application	20	4.35%
<u>Field Trip & Reports</u>	1	20	4.35%
	2	20	4.35%
	3	20	4.35%
	4	20	4.35%
<u>Mock Commission Meeting</u>	Position Statement	20	4.35%
	Presentation to Commission	20	4.35%
<u>Participation</u>	Flipped Classroom Exercises	20	4.35%
	DON'T BE SHY!!!	20	4.35%
<u>Total</u>		460	100.00%

Lecture Format:

Class meetings will follow both 'lecture-style' and 'flipped classroom' exercises. Lectures will be PowerPoint presentations that are made available AFTER lectures for downloading and reviewing. Some topics will be covered using 'flipped classroom' style in which you MUST prepare prior to class to actively participate. Additional material may be covered but not contained in Powerpoint presentations are considered part of testable class content. Additional materials include class discussions (including field trips), READINGS (there will be lots of reading in this course), films/web videos, discussion of current events, and questions.

Topics Covered (Tentative):

1. Definitions – Wildlife, Habitat, Conservation, and Management
2. Niche Theory
3. Habitat and the Niche
4. Theories of Habitat Selection
5. Habitat Selection
6. Measuring/Modeling Wildlife Habitat
7. Applying Habitat Models to Conservation
8. Island Biogeography Theory
9. Habitat Fragmentation
10. Restoration Ecology
11. Disturbance Ecology
12. Corridors and Connectivity
13. Community-Based Conservation
14. Endangered Species Planning and Policy
15. Landscape Conservation
16. Focal Species and Ecosystem Management
17. Habitat and Climate Change

Lab format:

The course is structured to be approximately ½ lecture-based and ½ hands-on experience based. The lab will consist of a number of different activities ranging from computer lab exercises to off campus field trips, including everything in between.

In terms of field trips, the goal is to introduce students to concepts on the practical application of wildlife habitat to conservation issues in western Montana. We are targeting 2-4 field trips for Tuesdays starting between 11:00 AM and 1:00 PM and finishing at 5:00 or 6:00 PM (or even later). We will provide you with those dates through posting on course website, emails, and/or in-class notification once our plans have been finalized (this should be within the next few weeks). There will be mandatory follow up reports. **Participation in all field trips is mandatory and students are expected to schedule for the allotted time, get off work, make alternate arrangements for other courses, etc. FIELD TRIPS ARE A KEY PART OF THE WILDLIFE BIOLOGY EXPERIENCE!!!!!!! An absence from a single field trip is an automatic 1 letter grade deduction from your final grade.**

Assignments:

There will be numerous assignments throughout this course (see tentative grading table above). The focus of the assignments is to introduce you to applying a diverse set of conservation skills. A few activities are listed below; note a few have multiple parts with each part having a grade. Additional activities maybe added or substituted for the ones listed below. **CHECK THE COURSE WEBSITE REGULARLY THROUGHOUT THE SEMESTER FOR POTENTIAL CHANGES.**

1. Definitions

In this course we will go over the various definitions for terms often used in our field. Specifically those in the title of this course. Thus, one assignment is about definitions. Students will be given an exercise to illustrate the various definitions for term(s).

2. Wildlife Research to Inform Conservation

From start to finish, we will be walking through a conservation process over numerous weeks in the semester. Most of the activities associated with assignment will occur during lab and on your own time. We will provide a conservation scenario and information on collecting and analyzing data (using camera traps) on wildlife species. We will be conducting multiple computer lab exercises to assist students in understanding the intrinsic and nuances of data. **UNDERSTANDING BIOLOGICAL DATA IS NOT ONLY IMPORTANT FOR RESEARCHERS. ITS ALSO IMPORTANT FOR MANAGERS, LAW**

ENFORCEMENT PERSONNEL, PROPERTY TECHNICIANS, DECISION AND POLICY MAKERS...!!!!!! Additionally, students will write a white paper to a 'governing' agency and a grant application to support a habitat easement using information from the data they collected.

3. Participation at seminar at the University of Montana

There are numerous opportunities on campus for students to learn about current, past, and future wildlife habitat conservation and management issues. For instance, the Wildlife Biology Program has a weekly seminar on Fridays from 1-3pm (FOR 206???) in which graduate students and guest speakers discuss the wildlife habitat conservation and management activity they are working on. The Organismal Biology and Ecology Program has similar seminars at noon and 4pm on Wednesdays. And there are many, many more in other programs such as Resource Conservation, Environmental Studies, Forestry, Systems Ecology, etc. Students need to attend 1 seminar of > 40 minutes throughout the semester. *Students are responsible for informing the instructor and TA of what seminar(s) they plan to attend 2 days prior to the seminar. A 1-2 page well-written summary of the seminar is due 1 week after the seminar. Write-ups should be typed in no smaller than 11-point font and double spaced.*

4. Mock Commission Meeting

This assignment is a mock state agency wildlife commission meeting and is intended to provide students with a greater appreciation for wildlife management and conservation from a regulatory standpoint. Balancing public attitudes and positions with the ecology of a wildlife population or ecosystem can be very challenging. It is often a mix of social values and biological justifications. Students will be provided a regulatory topic (agenda item) which they will have to review and justify before Commissioners (aka, FWP personnel, WBIO faculty, and/or friends of the WBIO program) at a public meeting (that is...anyone can be in the audience while you are presenting on a topic). More information on this process will be provided.

5. Additional Assignments

There may be additional assignments assigned during the semester.

Exams:

The mid-term (tentatively scheduled for **Oct 19th, 11:00 AM to 12:20 PM**) and final (**Dec 18th, 10:10 AM -12:10 PM**) exams will be multiple choice, true-false, short answer and short essay questions. Course material in lectures, labs, and readings will be considered for all exams. The midterm exam will cover all course content up to the class prior, and the final exam will be primarily weighted from material from the second half of the semester. But keep in mind that we will continue to build on the theoretical concepts and the application to conduct conservation as discussed in the first half throughout!

Students arriving at a scheduled exam AFTER the first person to finish the test has left the room will not be allowed to take the test and will be assigned a ZERO. Failure to take an exam during the regularly scheduled time will result in a grade of ZERO being assigned. Make-up exams will be scheduled only given documentation of a valid excused absence (see attendance below) 1 week prior to the regularly scheduled exam time. Make up exams will be essay format and students will have 1 week following return to school to schedule exams – this will be your responsibility.

General Course Policies

Attendance Policy:

Attendance will not be recorded in lecture because your desire to learn will dictate your presence. Students are individually responsible for all information presented in lectures, guest lectures, and on the course Moodle website. No make-up exams will be scheduled. In the case of medical or family emergency (e.g., legitimate, planned absences) I will work with the student individually in terms of rescheduling exam times, etc. Formal health care documentation will be required for legitimate emergencies.

Academic Dishonesty:

Trust between student and instructor is of paramount importance in academic settings. Academic dishonesty will not be tolerated in the classroom, and students found cheating will be punished to the full extent that University policy permits. The University of Montana expects all students to conduct themselves as honest, responsible, and law-abiding members of the academic community and to respect the rights of other students, members of the faculty and staff and the public to use, enjoy and participate in the University programs and facilities.

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 \(http://www.umt.edu/vpesa/\)](http://www.umt.edu/vpesa/).

Plagiarism:

Paraphrasing or quoting another's work without explicitly citing the source is plagiarism and a form of academic misconduct. Even inadvertent or unintentional misuse of appropriation of another's work (such as relying heavily on source material that is not expressly acknowledged) is considered plagiarism. If you have any questions about using and citing sources, you are expected to ask for clarification. This includes websites like Google and Wikipedia, although note that not all information retrieved (in fact most!) from such sites is not peer-reviewed, and thus not often scientifically valid.

Credit for Work from Another Class:

Submission of materials that were written for credit in another class is not permitted, regardless of whether the subject matter is appropriate (as per the University of Montana Student Conduct Code). In other words, you are expected to turn in original work for this course. If you have any questions, whatsoever, it is better to speak with the professor or teaching assistant before you get a zero for an assignment.

Mobile (Cell) Phone Policy:

Mobile phone use is disruptive to you and your fellow students' learning and my teaching. No use of mobile (cell) phones will be permitted in class. Students caught using mobile phones for texting, phoning, or browsing the internet will be immediately excused from class for the remainder of the lecture. After 1 incident, I will start by deducting one letter grade from the student's grade. If a student's mobile (cell) phone rings or vibrates during an exam, the student will receive a zero on the exam.

Email Policy:

I expect emails from students to myself and the teaching assistant to be composed professionally, with proper sentence structure and English writing style including clear, concise question(s). **Students are encouraged to send emails to myself and the teaching assistant through the course Moodle website.** I often get >100 emails per day so if you want me (and/or the teaching assistant) to respond please send emails through the course website.

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 the [Office of the Registrar Calendar \(http://www.umt.edu/registrar/calendar.php\)](http://www.umt.edu/registrar/calendar.php).

Important Dates Restricting Opportunities to Drop a Course Fall 2017:

Deadline	Description	Date
To 15 th instructional day	Students can drop classes on CyberBear with refund	September 21 = last day
16 th to 45 th instructional day	A class drop requires a form with instructor and advisor signature, a \$10 fee from registrar's office, student will receive a 'W' on transcript, no refund.	September 22 through November 2
Beginning 46 th instructional day	Students are only allowed to drop a class under very limited and unusual circumstances. Not doing well in the class, deciding you are concerned about how the class grade might affect your GPA, deciding you did not want to take the class after all, and similar reasons are not among those limited and unusual circumstances. If you want to drop the class for these sorts of reasons, make sure you do so by the end of the 45 th instructional day of the semester. Requests to drop must be signed by the instructor, advisor, and Associate Dean and a \$10 fee applies.	November 3 – December 12