

# Syllabus: WILD 370 Wildlife Habitat Conservation & Management, Spring 2019 – 4 Credits



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## Overview

**Lecture times:** 11:00 – 12:20 PM Tuesday and Thursday (FOR 106)

**Laboratory (field trip) times:** 13:00 – ~5:00 pm Thursdays only on specified dates AND locations throughout the semester. They will NOT *usually* be in HS 411 as listed in the syllabus. Students must be able to attend all field trips, no exceptions. Failure to attend a lab will preclude students from completing the lab assignment for that lab, earning a 0 grade.

**Prerequisites:** Ecology (BIOE 370/371\*) or equivalent upper-division ecology course, AND statistics (STAT 216/WILD 240) AND  $\geq$  junior standing in Wildlife Biology. \* **Pre-requisites will be enforced.**

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

**Course Objectives:** To gain familiarity with the theoretical importance of habitat to wildlife in terrestrial ecosystems, and to gain proficiency with the application of theory 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 during the semester where students will be expected to be able to apply theories to practical conservation issues in Montana.

**Required Readings:** Assigned readings from textbooks, scientific papers, and other readings will be posted on blackboard PRIOR to class – students are expected to have read the readings and be prepared to discuss them in class.

**Course Website:** [MOODLE](#) Students will need an active UM NetID to access the Moodle class webpage. Take the UM Online 101 courses to learn more about Moodle.

**Final Exam Time:** **8:00 - 10:00, Monday May 4.** The final exam schedule is posted here: [Final exam schedule](#). *Note: final exam times are YOUR responsibility to confirm and conflicts need to be considered 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.*

**Lecture Format:**

Lectures will be PowerPoint-based and made available on the course website AFTER lectures for downloading and reviewing. Additional material will be covered not contained in PowerPoint presentations and will be part of testable class content. Additional materials will include class discussions, class activities and learning excercises, films, discussion of current events, and questions.

**Lab Format:**

There will be 8 scheduled labs at various locations and times. The other 2 lab assignments will be takehome assignments or attending a lecture presentation. Generally, the first scheduled lab will be a radio telemetry exercise on campus in winter conditions – so dress appropriately. The next three labs will take place on campus in the computer labs in Stone Hall from 1-5, and the class will be split into 2 sections from 1-3 and 3 - 5. Computer Labs will be using Excel, but primarily the statistical package R. Labs 4 – 7 will be field trips will leave promptly at 13:00 and return ~ 5:00 pm (sometimes later) instead of a regular class meeting. The last two ‘lab’s will be student presentations.

**Participation in all field trips is mandatory and students are expected to schedule all labs for the allotted time, get off work, make alternate arrangements for other courses, etc. etc. FIELD TRIPS ARE A KEY PART OF THE WILDLIFE BIOLOGY EXPERIENCE! Students with un-excused absences from field trips will be unable to complete the assignment for that lab.**

**Grading:**

This class is offered for traditional letter grade only, it is not offered under the credit/no credit option. Furthermore, there is no graduate increment offered in this class.

Category	Description	Marks	%
<u>Exams</u>	Midterm 1	50	13%
	Final Exam	75	20%
Quizzes	Weekly quizzes focused on readings (~10)	25	7%
<u>Lab reports</u>	Lab reports (10)	100	27%
<u>Review Topic</u>	Problem Statement & Bibliography	25	7%

	Oral Presentation	50	13%
	Summary Paper	25	7%
Class Participation	Participation in class discussion, online MOODLE forums, labs, and field trips	25	7%
		375	100%

### **Late Assignment Policy**

- *Late assignments will be considered at a -10% grade/calendar day penalty, including the day the assignment is due if not handed in during normal class or lab time.*

**Exams:** Exam(s) will be multiple choices, 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 discussed in the first half throughout! Time for exams will be allotted as the regular course time, 11:00-12:20 PM, or the Final Exam time, and no extra time will be given to take exams. 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.

**Quizzes:** There will be ~10 ‘pop’ quizzes at the beginning of 1 lecture, approximately once / week to ensure that students are reading critical background reading, reviewing concepts from previous lectures, and being active learners.

**Assignments:** There will be 10 ‘lab reports’ including 4 take home assignments, 2 computer lab reports, and 3 field trip reports. Assignments will all be take-home, some will involve group work, and formats will vary between assignments – detailed instructions will be given in lecture for each assignment. In general, lab assignments will be due in the immediately following lecture. One lab assignment will be for students to attend a lecture on campus on a topic related to habitat conservation and management, and this assignment will be posted on MOODLE in week 1.

**Wildlife Habitat Ecology & Conservation Review:** In this assignment, students will pick a topic of their choice on a wildlife habitat conservation issue or concept to review in written and oral presentation form. This is an example to dive into something that really interests you about wildlife habitat ecology and/or conservation, read as many papers and books you can about it, and then put it all together in an oral presentation and short written summary. We will spend time in lecture going over examples of review/syntheses papers and example topics. There are several components to the review topic that will be completed throughout the semester including completion of an annotated bibliography, an oral presentation and a 5-page final summary paper. Oral presentations will be scheduled during class & lab meeting times on the syllabus at the end of the semester in a miniconference format.

**Class Participation:** students will be expected to participate in class discussions, online Moodle discussions and forums, and ask guest lecturers and field trip hosts respectful and thoughtful questions throughout the semester. Grades will be assigned based on all forms of class participation.

#	Date	Day	Approximate Lecture Topic	Assignments	Thursday Labs
1	14-Jan	Tues	1. Introduction / Syllabus		No Lab
2	16-Jan	Thur	2. Defining Wildlife & Habitat		
3	21-Jan	Tues	3. Habitat and the Niche		No Lab
4	23-Jan	Thur	4. Niche Theory II		
5	28-Jan	Tues	5. Critical Habitat		No Lab
6	30-Jan	Thur	6. Wild Ways Documentary	<b>Report: Habitat definitions due</b>	Lab 1 : Telemetry on campus
7	4-Feb	Tues	7. Density-dependent habitat selection		
8	6-Feb	Thur	8. Habitat selection and ecological traps	<b>Lab 1 report due</b>	Lab 2: Telemetry Analysis Lab - Stone Hall
9	11-Feb	Tues	9. Measuring habitat use		
10	13-Feb	Thur	Guest Lecture	<b>Lab 2 report due</b>	Lab 3: Habitat use R Lab - Stone Hall
11	18-Feb	Tues	10. Measuring habitat selection		
12	20-Feb	Thur	11. Resource selection	<b>Lab 3 report due</b>	Lab 4: Habitat Selection R Lab - Stone Hall
13	25-Feb	Tues	Guest Lecture		
14	27-Feb	Thur	12. Island biogeography theory	<b>Lab 4 report due</b>	No Lab
15	3-Mar	Tues	13. Island biogeography exercise		
16	5-Mar	Thur	14. Habitat fragmentation I	<b>Report: Island biogeography due</b>	No Lab
	10-Mar	Tues	15. Habitat fragmentation II	<b>Habitat Problem &amp; Bibliography Due</b>	
17	12-Mar	Thur	<b>Midterm</b>		
18	17-Mar	Tues	<i>Spring Break</i>		
19	19-Mar	Thur	<i>Spring Break</i>		
20	24-Mar	Tues	16. Applying Habitat Models to Conservation		
21	26-Mar	Thur	17. Community-based conservation		Lab 5: Blackfoot Challenge
22	31-Mar	Tues	18. Ecosystem management		
	2-Apr	Thur	19. Road ecology	<b>Lab 5 report due</b>	Lab 6: North Bitterroot Corridor
23	7-Apr	Tues	20. Corridors and Connectivity		
24	9-Apr	Thur	21. Yellowstone to Yukon	<b>Lab 6 report due</b>	Lab 7: Field Trip Hwy 93
25	14-Apr	Tues	22. Community based conservation		
26	16-Apr	Thur	23. Fire and Wildlife	<b>Lab 7 report due</b>	
27	21-Apr	Tues	24. Wildlife and climate change		

28	23-Apr	Thur	25. Semester wrap-up		<b>Student presentations 1:00 - 4:00</b>
29	28-Apr	Tues	<b>Student Presentations</b>		
30	30-Apr	Thur	<b>Student Presentations</b>		<b>Student presentations 1:00 - 4:00</b>
31	4-May	Monday	<b>Final Exam 8:00 - 10:00 AM</b>		

## General Course Policies

### Email Policy:

Next to cell phone use, email is perhaps the world's most banal form of communication. I require emails to myself and the teaching assistant from students to be composed professionally with proper sentence and English writing style with no spelling mistakes, a CLEAR subject line that CLEARLY identifies the COURSE CODE [i.e., Subject: WILD 370 question from student X], and a clear, concise question. Because of email proliferation, professors often get >200 illformed and unnecessary emails a day, wasting everyone's precious time. Finally, I do not reply to emails sent after normal working business hours, Monday to Friday. In general, I also do not answer my office phone because I am usually in another meeting.

Furthermore, while I may be able to answer procedural and simple questions on email, the main use of email in this class should be to request a meeting outside of the normal office hours of myself and teaching assistant. **IF you have general questions about course material, the encouraged vehicle for class discussion will be via the MOODLE discussion forum on our class website.** Students emailing me or the TA with a general question will be directed to repost their general course question to MOODLE so that we can provide an answer for all students. Chances are, if you have a question about an assignment, material in class, or a class-related topic, someone else does. Answering your question for everyone will help the entire class.

**Mobile Phone Policy:** Mobile phone use is disruptive to both your own, your fellow students learning, and teaching. No use of mobile phones will be permitted in class, and ESPECIALLY NOT on field trips. Student caught using mobile phones for texting, phoning, browsing the internet will be excused immediately from class for the remainder of the lecture. After 3 such incidents, I will start by deducting one letter grade from the student's grade.

## General Course Policies

### Students with Disabilities Statement

- If you are a student with a disability and wish to request reasonable accommodations for this course, contact me privately to discuss the specific modifications. Please be advised, I may request that you provide a verification letter from Disability Services for Students. If you have not yet registered with Disability Services, located in Lommasson Center 154, please do so in order to coordinate your reasonable modifications. For more information, visit the Disability Services website at [www.umt.edu/disability](http://www.umt.edu/disability).

### Student Conduct Code Statement

- 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](#).
- Academic misconduct, such as Cheating or Plagiarism [see §V(A)(1) & (B)(1) of the Student Conduct Code] will be addressed on a case-by-case basis but can most often results in an automatic failing grade in the class as determined by the sole prerogative of the instructor. Moreover, University sanctions can include warnings, probation, suspension, expulsion, and denial of a degree.

**Credit for Work from Another Class**

Submission of papers 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.

**Important Dates Restricting Opportunities to Drop a Course Spring 2020**

<https://www.umt.edu/registrar/calendar.php>

Deadline	Description	Date
To 15 <sup>th</sup> instructional day	Students can drop classes on CyberBear with refund & no “W” on Transcript	February 3, 2020
16 <sup>th</sup> to 45 <sup>th</sup> 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.	February 4 - March 24 @5 PM
Beginning 46 <sup>th</sup> 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, switching majors, 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 <sup>th</sup> instructional day of the semester. Requests to drop must be signed by the instructor, advisor, and Associate Dean (in that order) so if you pursue this request, leave sufficient time to schedule meetings with each of these individuals (generally this will take at least 3-5 working days). A \$10 fee applies if approved. Instructor must indicate whether the individual is Passing or Failing the class at the time of request.	May 1 @ 5pm

**Class Attendance Policies**

- Attendance will not be recorded in lecture. Students are individually responsible for all information presented in lectures, guest lectures, readings and field trips. No make-up exams will be scheduled. In the case of medical or family emergency I will work with the student individually in terms of rescheduling exam times etc. Formal health care documentation will be required for legitimate emergencies. Please acquaint yourself with the specific code in the [UM Catalog](#) (search for “Class Attendance/Absence Policy”).
  - Students who are registered for a course but do not attend the first two class meetings may be required by the instructor to drop the course.