

## WILD370: Wildlife Habitat Conservation & Management

Syllabus 16 Jan 2022

### 4 Credits

#### Covid rules:

In general: follow the requirements set by UofM: <https://www.umt.edu/coronavirus/default.php>  
Right now (16 January 2022), this includes the **requirement to wear a mask in class/labs and in group transportation.**

#### Specifics:

1. **Mask use is required** in all indoor space, including in the classroom or laboratory, and in vehicles (for excursions). Cover mouth and nose properly. No mask, no class.
2. With the Omicron variant, KN95 / N95 masks are far more effective than other types of masks; **please use KN95 / N95 masks**, but note that the university does not require this type of mask.
3. **If you feel sick and/or are exhibiting COVID-19 symptoms, please don't come to class and contact the Curry Health Center** at (406) 243-4330.
4. If you are required to isolate or quarantine, you will receive support in the class to ensure continued academic progress. (e.g. through recorded lectures).
5. Vaccines and boosters are effective at preventing severe illness, hospitalizations and death from COVID-19, even as data suggest breakthrough infections are more common with the Omicron variant. UM recommends students get the COVID-19 vaccine. COVID-19 vaccines are available on a walk-in basis at the Health Service Pharmacy in Curry Health Center from 9 a.m. to 4 p.m. Monday through Friday. Call 406-243-5171 if you have any questions.
6. Where social distancing (maintaining consistent 6 feet between individuals) is not possible, specific seating arrangements will be used to support contact tracing efforts.
7. Class attendance and seating will be recorded to support contact tracing efforts.
8. Drinking liquids and eating food is discouraged within the classroom and in vehicles. Keep your mask on at all times, except in case of an emergency (and leave classroom, or exit vehicle when it is safe to do so).
9. Mask use is required in vehicles when traveling to field sites as part of class/fieldwork.
10. Please note this class is being recorded.

If you do not comply with the covid rules:

1. Not complying with the mask mandate is a violation of the student conduct code.
2. If one or more students do not comply, the class/lab/excursion will be dismissed for that period.
3. Students who do not comply are reported to the Deans Office.

In summary, **there is no use coming to class/lab/excursion if you do not comply with the Covid rules.**

In classroom and in lab room: You will **sit in same chair during the duration of the course, remember where you need to sit next time.** At the start of the course, the TAs will make a classroom map to allow for better tracing in case of a COVID contamination. The TAs will also keep track of those in physical attendance.

We reserve the right to edit and revise the syllabus given a 2 week notice.

**Accommodations:** If you require a COVID-related accommodation in order to safely attend, you should contact the [Office of Disability Equity](#) (ODE) (formerly Disability Services for Students). ODE will work with the you and the course instructor to make a plan on a case-by-case basis.

Student Conduct code: <https://staging.umt.edu/student-affairs/community-standards/student-code-of-conduct-2021-pdf>

Mask policy UofM: <https://www.umt.edu/coronavirus/mask-policy.php>

Covid FAQs: [https://www.umt.edu/coronavirus/coronavirus\\_faqs.php](https://www.umt.edu/coronavirus/coronavirus_faqs.php)

**Lead Instructor:** Marcel Huijser, PhD

Email: [marcel.huijser@mso.umt.edu](mailto:marcel.huijser@mso.umt.edu)

**Office Hours:**

Thu 9:00 AM - 10:00 AM

Note: I do not have office space on campus.

If you want to meet, please use video conferencing.

**Teaching Assistants:**

1. Leah Joyce

Email: [leah.joyce@umconnect.umt.edu](mailto:leah.joyce@umconnect.umt.edu)

2. Amanda Emmel

Email: [amanda1.emmel@umconnect.umt.edu](mailto:amanda1.emmel@umconnect.umt.edu)

**Course period:**

Spring 2022

First lecture: Tue 18 Jan 2022

Last lecture/lab: Thu 5 May 2022

**Lectures:** Tuesdays and Thursdays 11:00 AM-12:20 PM

Standard: Classroom, Forestry 206

**Note: all classes will be recorded.**

**Note: cell phones off.**

**Note: ask questions, especially to guest lecturers.**

**Minimum 2 questions per student during course; if you don't meet that, there will be a 20% deduction from your grade (the TAs keep track).**

**If you have a medical concern about attending in person or completing tasks:**

1. Contact the [Office of Disability Equity](#) (ODE).
2. Communicate this with your instructor.
3. Participate via zoom, in audio and video mode.
4. If you can't attend in real-time through zoom, view the recorded lecture.

**If you can't physically attend or complete tasks for a non-medical reason:**

1. Communicate this with your instructor.
2. Participate via zoom, in audio and video mode.
3. If you can't attend in real-time through zoom, view the recorded lecture.

**Check before lecture about potential changes/cancellations.**

We reserve the right to edit and revise the syllabus given a 2 week notice.

**Lab/Excursions:** Thursdays 1:00 PM - 4:50 PM

**For classroom labs:** Forestry 305

**For excursions:** We will drive to our destination.

**Note: all classroom labs will be recorded.**

**Note: cell phones off.**

**If you have a medical concern about attending in person or completing tasks:**

1. Contact the [Office of Disability Equity](#) (ODE).
2. Communicate this with your instructor.
3. Participate via zoom, in audio and video mode.
4. If you can't attend in real-time through zoom, view the recorded lecture.

**If you can't physically attend or complete tasks for a non-medical reason:**

1. Communicate this with your instructor.
2. Participate via zoom, in audio and video mode.
3. If you can't attend in real-time through zoom, view the recorded lecture.

**Check before classroom lab about potential changes/cancellations.**

**For excursions:** In-person only, no zoom.

Standard: physically attend, group transportation.

Ask questions, especially to our hosts.

**If you have a medical concern:**

1. Contact the [Office of Disability Equity](#) (ODE).
2. Communicate this with your instructor.
3. If the medical concern is about group transportation: consider arranging for your own transportation.
5. If the medical concern is about something else, formulate your own proposal for an assignment instead of physically participating in the excursion (submit proposal by the first Thu after the excursion).
6. Seek approval of the instructor for your assignment proposal, several versions may be needed before approval can be granted.
7. Submit your assignment. **You need to get a "pass" on your assignment.** To obtain a pass, you may have to address comments of the instructor and submit a 2<sup>nd</sup> version.
8. Ask your fellow students for notes of the excursion.

**If you can't physically attend for a non-medical reason:**

1. Communicate this with your instructor.
2. Formulate your own proposal for an assignment instead of physically participating in the excursion.
3. Seek approval of the instructor for your proposal, several versions may be needed before approval can be granted.
4. Submit your assignment. **You need to get a "pass" on your assignment.** To obtain a pass, you may have to address comments of the instructor and submit a 2<sup>nd</sup> version.
5. Ask your fellow students for notes of the excursion.

We reserve the right to edit and revise the syllabus given a 2 week notice.

**Zoom Information for lectures and labs (not excursions)** Topic: WILD 370 Lecture

**Here is the zoom link for lectures and classroom labs:**

<https://umontana.zoom.us/j/95490325506>

Meeting ID: 954 9032 5506

### **Course Description**

Application of principles of wildlife biology to conservation and management of wildlife habitat, including statistical and field applications.

### **Course Objectives**

To gain a familiarity with the theoretical underpinnings of the importance of habitat to wildlife species in terrestrial ecosystems. To do this, students will explore habitat study design, data collection, and statistical modeling of wildlife habitat.

To apply this theoretical basis to wildlife habitat conservation issues. Students will be expected to apply theories to practical conservation issues in the form of a group project.

To think independently, critically, and creatively about issues with conservation components. Students will have opportunities to hone their critical thinking skills by evaluating the work of professional and amateur scientists/journalists, and by presenting a habitat or area management plan.

Specific “take home” messages from this course are:

1. Wildlife conservation is wildlife management. Not all wildlife management is conservation.
2. You can only be effective at wildlife management and conservation if you effectively work with stakeholders and their perspectives. This is usually referred to as “human dimensions”, but increasingly this also includes “social justice”.
3. Managing wildlife for “maximum sustainable yield” can be categorized as wildlife conservation, but managing wildlife for “maximum sustainable yield” does not necessarily also qualify as managing for “ecological integrity”.
4. Natural resources, including space are not endless, also not in the American west. Existing protected areas are not necessarily large enough and connected sufficiently to other protected areas to maintain viable wildlife populations. Effective wildlife conservation and management needs to happen on a landscape level, not necessarily restricted by property boundaries (private landowners, refuges, national forests, BLM land, etc).
5. Ecological restoration and rewilding can help reverse a decline in biodiversity and natural areas.

### **Prerequisites**

We reserve the right to edit and revise the syllabus given a 2 week notice.

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

### **Course Moodle Website**

MOODLE: [moodle.umt.edu/login](http://moodle.umt.edu/login)

Course emails will be sent through Moodle using your email account information in Moodle.

Please read these emails before coming to class.

Course material will also be placed here.

### **Tasks for your grade (Assignments, quizzes, project)**

Assignments: This involves reading a publication and writing a summary (300-500 words).

Quizzes: These are questions with multiple choice style answers.

Group Project: The Bison Range will be at the center of the “project”. The excursions during the semester will be particularly informative to learn about the wildlife habitat, conservation and management issues on the Bison Range and the surrounding lands. Your task is to formulate a management plan for the Bison Range. There will be a different theme or “emphasis” for each group; for example:

- a. Bison conservation
- b. Wildlife conservation on a landscape level
- c. Tribal perspectives (Culture, spirituality, health, food)
- d. Hunting and visitor experience
- e. Native grassland restoration / juniper / invasive weed management in relation to managing wildlife.
- f. Threatened and endangered species (e.g. bull trout, grizzly bear)
- g. ....You can formulate your own emphasis or theme, but it is beneficial to have perhaps 5-8 people in your group rather than doing the work alone or just with a few others.

There is not one “correct” management plan. The real challenge is to clearly formulate the goals and objectives (consistent with the theme or emphasis of your group), and how your management choices help you achieve those goals. Given the complex social, cultural and ecological environment, choices will have to be made as there may well be conflicting objectives. Clarity and consistency are important; the proposed management must relate to the objectives and goals and vice versa. Note that this is an entirely theoretical exercise for educational purposes; it is not meant to push any land manager in any direction. This will be something you work on in small groups (e.g. 5-8 people in each group). This task will probably start around March; the excursions provide you with important insights. More details for the project will be given around March. Every group member must actively participate; do not leave it up to other group members to make the project a success.

We reserve the right to edit and revise the syllabus given a 2 week notice.

We reserve the right to edit and revise the syllabus given a 2 week notice.

<b>Tasks</b>	<b>Maximum Points</b>
5 assignments	20 pts each, 100 pts total
5 quizzes	20 pts each, 100 pts total
Project	100 pts*
Total Maximum Points	300

\*There will be an evaluation sheet that allows you to **indicate the contribution level of your group members for the project**. If your group members feel that you did not pull your weight for the group project, this will affect your individual grade (but not necessarily that of your group members).

Your total number of points (maximum 300) will be divided by 3 to obtain a “percentage”.  
The maximum percentage is  $300/3 = 100\%$ .

If you do not ask the **minimum number of questions during the semester (at least 2)**, there will be a **20% deduction on the final percentage**; it will affect your grade substantially.

Your grade (letter) will be according to this table:

A	93≥	B+	87≥	C+	77≥	D+	67≥
A-	90≥	B	83≥	C	73≥	D	60≥
		B-	80≥	C-	70≥	F	60<

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

### **Grading Disputes**

Discrepancies must be addressed within **two-weeks** of assignment grade being posted or handed back.

### **There is no “Final” exam**

#### **Due dates:**

Assignments, quizzes:

Turning it in within 1 day after the due date results in 10% loss per day of the maximum points.

So, 1 day late means that you can score at most 90% of the maximum points (no longer 100%).

Turning it in 10 days late results in 100% loss (there is no use turning it in).

If you cannot meet a deadline and you think you have a valid reason, ask for an extension **BEFORE** the deadline (not after the deadline).

#### **Project**

Your group project needs to be submitted and presented by the due date.

This is at the end of the semester, no extension possible.

We reserve the right to edit and revise the syllabus given a 2 week notice.

### Likely topic of the lectures

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. Community Ecology
12. Human Dimensions
13. Corridors and Connectivity
14. Community-Based Conservation
15. Endangered Species Planning and Policy
16. Landscape Conservation
17. Focal Species and Ecosystem Management
18. Habitat and Climate Change

### Lecture Schedule and Classroom Learning Environment

A lecture will be delivered each class period by the professor, teaching assistant, or a guest lecturer. Some of the guest lectures have been recorded in a previous semester. All lectures will be recorded. Typically, lectures will be based on a Powerpoint presentation, which will be made available to students after the lecture via the course website (or there will be a recording of the lecture). **Students may be quizzed on all information contained within Powerpoint presentations and any other information presented during lectures and Q&A sessions.** The purpose of these discussions (Q&A sessions) is to enhance classroom learning by providing students the opportunity to engage with their peers in dialogue on the topics covered in class. **To allow time for quality classroom discussions, not all material contained within Powerpoint presentations will be formally presented during class time.** Thus, students will need to study all material contained within Powerpoint presentations for each quiz, regardless of whether the given material was specifically presented during class.

**The quizzes will focus on course material presented in lectures and associated Powerpoint presentations.**

### Email Policy

I expect emails to myself and the teaching assistants from students to be composed professionally, a **CLEAR** subject line that **CLEARLY** identifies the COURSE [i.e., Subject: WILD 370: Descriptive Subject Heading], and a clear, concise question. [Here is a link on how to email a professor.](#)

We reserve the right to edit and revise the syllabus given a 2 week notice.

### **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.

### **Curry Health Center Counseling**

Counseling assists students by addressing their personal counseling and psychotherapy needs for the purpose of helping them gain the most from their time on campus. When a student's mental health care needs are beyond the scope of our services, we will assist with referrals to community-based providers for specialized or longer-term care.

Services provided:

- Individual Counseling (telecounseling only)
- Group Therapy - (telecounseling only)
- Topical Seminar - (telecounseling only)
- Urgent one-time Appointments Available
- Limited Psychological Assessments
- Psychiatric Consultation
- Consultation with concerned others
- Referrals to community-based resources

Behavioral Health Options for alcohol, other drugs, gambling and weight management

Call 406-243-4712 to make an appointment. For crisis, after-hours care call the National Suicide Lifeline at 1-800-273-8255, contact the Crisis Text line: text MT to 741-741, or contact your nearest Emergency Department.

Curry Health Center Counseling Services provides a confidential and inclusive environment to address the personal, behavioral and mental health needs of all UM students. We specialize in addressing the concerns and goals of our diverse UM community. Every student has to navigate a wide variety of stressors and challenges during their college career and we're here to offer support as well as assist in getting connected to resources on and off campus. Our licensed counselors, social workers and psychologists, as well as advanced graduate students, offer individual and group therapy in addition to urgent counseling. Your initial consultation is no cost and subsequent individual sessions are \$25; group therapy is at no cost.

We reserve the right to edit and revise the syllabus given a 2 week notice.

## Online Classroom Etiquette Suggestions

- **Please, it is highly encouraged that you have your camera on.** *However, it will not be mandated.*
- **Behave professionally, do not waste anyone's time.**
- Try to log into your class or meeting from a distraction-free, quiet environment.
- **Please keep your audio on mute** until you want to speak. This will help to limit background noise.
- Consider using **headphones** with an external mic for best hearing and speaking capabilities.
- **Close unneeded applications** on your computer to optimize the video quality.
- If you would like to speak or answer a question, use the "Raise Hand" feature. Then unmute yourself after your teacher calls on you.
- When you are speaking, let others know that you are finished by saying something like, "That's all," or "I'm done," or "Thank you," so that everyone knows you have finished your comments.
- If you would like to use the chatbox, **remember that it is public**, and a record of the chat may be kept and archived, **even in the breakout rooms**.
- Keep paper and a pen or pencil handy to take notes.
- Make sure your video is on (if you have camera capabilities) so your teacher and peers can see you.
- Be mindful of your background lighting. If you are sitting with your back to a window, you may be silhouetted by the light coming through.
- Please take care of your personal needs (appropriate dress, basic hygiene, eating, chewing gum, talking to others in your home, etc.) before entering a Zoom classroom.
- Please do not use profanity or inappropriate language.
- All Zoom lectures are recorded so please act accordingly.