

# Principles of Wildlife Management

## ES/Bio 314, spring 2013

### Course description

This course is designed to help students bridge the gap between academic experience and advances into the wildlife profession. The course will apply population and community ecology to the management and conservation of wild populations.

### Specific course objectives

1. To relate biological concepts and ecological principles to the management of natural resources, habitats, and wildlife populations.
2. To encourage students' professional development through problem solving, critical thinking, and application of education.
3. Provide an opportunity for students to discuss current issues and research in wildlife and fisheries management.
4. Provide experience working in teams to solve reality-based problems.

*By the end of this course, students should be able to:*

1. Demonstrate an ability to assess wildlife population dynamics and the demographic and genetic structure of populations.
2. Apply general ecological principles to management decisions.
3. Describe the process of approaching a management problem including setting objectives, making decisions, and developing monitoring strategies.
4. Demonstrate an awareness of relevant management agencies and legislation that influences wildlife management decisions.

### Instructor/class information

#### *Instructor*

M. Elsbeth (Misty) McPhee  
mcpheem@uwosh.edu  
424-0644

office hours:

Tues 11:00 am – 1:00 pm  
Wed 9:00 – 10:00 am

Fri 2:00 – 3:00 pm

If these don't work for you, I'm happy to set up an appointment at a more convenient time. My schedule is posted on D2L so you can see when I'm available.

office: 3448 Sage

Meeting times/locations:

Monday, Wednesday

3:00 – 4:30 pm

Sage Hall 2218

### *Required Texts & Materials*

Mills, L. Scott. 2007. Conservation of Wild Populations: Demography, Genetics, and Management. Blackwell Publishing, Malden, MA.

Other readings might be assigned as we go through the course — these will be posted on D2L.

### *Grading*

Your grades will be based on (for descriptions, see below):

1. Class participation	100
2. Three exams (100 pts each)	300
3. In-class or field exercises (20 pts each)	~280
4. Two field trips (30 pts each)	60
6. Recovery Plan	100
prospectus (10)	
presentation (30)	
group work (10)	
write-up (50)	

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~840

To figure your grade at any point throughout the term, add the total points earned and divide by the total points possible up to that point. Attendance and participation can raise a borderline grade.

<u>% of total points</u>	<u>Grade</u>	<u>% of total points</u>	<u>Grade</u>
94-100	A	73-76	C
90-93	A-	70-72	C-
87-89	B+	67-69	D+
83-86	B	63-66	D
80-82	B-	60-62	D-
77-79	C+	≤ 59	F

*Grade descriptions*

1. **Class participation** will be graded based on attendance and overall participation and engagement in the course. Obvious signs of engagement are questions and participation in discussion; other signs are coming to talk to me in office hours or before/after class; and finally, just general attitude and attendance in the classroom.

Participation grades will be given as follows:

- A = participates often and meaningfully in class discussions
- A- = participates a fair amount
- B = participates some
- B- = participates rarely
- C = in class but doesn't participate

You will lose points for each class missed.

2. There will be three exams, each worth 100 points.
3. There will be at least one field or in-class exercise per week. These will be worth 20 points each. They will be announced in class as the semester progresses.
4. There will be two **mandatory weekend field trips**: Saturday, 13 April and Sunday, 21 April. Put them on your calendar NOW.
5. For your final group projects, you divide into six groups and write a recovery plan for a species of your choice. On **13 March**, you will turn in a prospectus of your project, then on either 6 or 8 May, you will give a 30-min presentation to the class on your species. A full description of the assignment will be posted on D2L.

## Miscellaneous – but important – comments

1. Cell phone use will NOT be permitted in my classroom. If your cell phone goes off **or you text during class**, you will be asked to leave and I will automatically deduct 50 points from your overall grade.
2. Laptops: you are more than welcome to use laptops in class to take notes, but you are **NOT** to use them for any other purpose. If I see you using your laptop for anything other than note-taking, I will ask you to close your computer and automatically deduct 50 points from your overall grade.
3. This is a conservation class, therefore, please turn in documents as **Pdfs**. I can NOT open .wps documents – any document that I can't open will be disregarded.
  - o **If your document isn't a pdf or isn't double spaced, you won't receive any feedback – you'll just receive a grade.**

If you must turn in a hard copy, consider use both sides of a sheet of paper, or even use scratch paper! Let's try to keep our resource use down.

If you are late for an assignment and the dropbox is closed, put your assignment in the "Late assignments" dropbox. **I WILL NOT ACCEPT ANY ASSIGNMENT VIA EMAIL – EVER.** If it goes into the late dropbox, I don't guarantee it will get graded before the end of the term. Do not complain about timing – if you were late, I have no obligation to be timely. All late submissions are subject to a 10 - 20% penalty and will appear as a 0 on D2L until I grade it which, again, might not be until the end of the semester.

4. The syllabus is a general guideline – we might go slower or faster depending on interest and engagement on various topics. Feel free to give feedback on the speed of the class!

5. **STUDENTS WITH DISABILITIES ARE WELCOME IN THIS COURSE.** Please contact me in the first week of class so that we may arrange all possible accommodation ahead of time.

6. **EMAIL COMMUNICATION and D2L** will be used frequently throughout the semester to communicate between Instructors and Students. Emails constitute legal, official University communication. Not checking your email is not an excuse for performance problems in the class. Contact Academic Computing or any Campus Computer Lab supervisor for assistance with email and D2L.

7. **ACADEMIC HONESTY** policies are clearly defined at this University and all students are expected to abide by them. Penalties for violations are severe in this course. Cheating on an exam (including looking at someone else's paper) at a MINIMUM leads to zero on that exam, with no opportunity for a make-up or extra credit. A second offense is an F in the course and a report to Dean of Students.

## *Proposed* lecture and assignment schedule

<u>Date</u>	<u>Topic(s)</u>	<u>Text Reading</u>
28 January	<ul style="list-style-type: none"> <li>• Introduction to wildlife management</li> <li>• Course structure</li> </ul>	Chapt 1
30 January	<ul style="list-style-type: none"> <li>• Wildlife laws</li> <li>• Bison and Brucellosis</li> <li>• Prioritizing conservation</li> </ul>	
4, 6 February	<ul style="list-style-type: none"> <li>• Probability and statistics</li> </ul>	Chapt 2
11, 13 February	<ul style="list-style-type: none"> <li>• Population vital rates</li> </ul>	Chapt 4, pp 59-79
18, 20 February	<ul style="list-style-type: none"> <li>• Population vital rates, cont.</li> <li>• Diversity indices</li> </ul>	Chapt 4, pp 79-87
25 February	<ul style="list-style-type: none"> <li>• <b>EXAM 1</b></li> <li>• Geometric population growth</li> </ul>	Chapt 5
27 February	<ul style="list-style-type: none"> <li>• Geometric population growth</li> <li>• Density dependent population growth</li> </ul>	Chapt 6
4 March	<ul style="list-style-type: none"> <li>• Density dependent population growth</li> <li>• Population projection models</li> </ul>	Chapt 7
6 March	<ul style="list-style-type: none"> <li>• Population projection models</li> <li>• Predation</li> </ul>	Chapt 8
11 March	<ul style="list-style-type: none"> <li>• Predation</li> <li>• Genetic concepts</li> </ul>	Chapt 3
13 March	<ul style="list-style-type: none"> <li>• <b>Tentative: Wildlife jobs panel</b></li> <li>• <b>DUE:</b> Recovery Plan Prospectus</li> </ul>	
18, 20 March	<ul style="list-style-type: none"> <li>• <b>No class – spring break</b></li> </ul>	
25, 27 March	<ul style="list-style-type: none"> <li>• Genetic variation and fitness</li> </ul>	Chapt 9

1 April	<ul style="list-style-type: none"> <li>• <b>EXAM 2</b></li> <li>• Dynamics of multiple populations</li> </ul>	Chapt 10
3 April	<ul style="list-style-type: none"> <li>• Dynamics of multiple populations</li> <li>• Human perturbations</li> </ul>	Chapt 11
8 April	<ul style="list-style-type: none"> <li>• Predicting dynamics of small and declining populations</li> </ul>	Chapt 12
10 April	<ul style="list-style-type: none"> <li>• <i>No class</i></li> </ul>	
<b>Saturday, 13 April: Field trip to Wild Rose Fish Hatchery</b>		
15 April	<ul style="list-style-type: none"> <li>• Predicting dynamics of small and declining populations</li> </ul>	
17 April	<ul style="list-style-type: none"> <li>• <i>No class</i></li> </ul>	
<b>Saturday, 21 April: Field trip to Horicon Marsh</b>		
22 April	<ul style="list-style-type: none"> <li>• Predicting dynamics of small and declining populations</li> <li>• Focal species concepts</li> </ul>	Chapt 13
24 April	<ul style="list-style-type: none"> <li>• Harvested populations</li> </ul>	Chapt 14
29 April	<ul style="list-style-type: none"> <li>• Harvested populations</li> </ul>	
1 May	<ul style="list-style-type: none"> <li>• <b>EXAM 3</b></li> </ul>	
6, 8 May	<ul style="list-style-type: none"> <li>• <b>Group presentations of recovery plans</b></li> </ul>	