

Course Syllabus

Wildlife 334/534 – Ungulate Ecology, Spring 2020

Instructor - Dr. Scott Hygnstrom, shygnstr@uwsp.edu, 715.346.2301

Class times - 8:00 - 8:50 am, Tuesdays and Thursdays; TNR 354

Lab times - 10:00 - 11:50 am, Fridays; TNR 354 or arranged

Office hours - 9:00 - 11:00 am Thursdays and 12:00 - 1:30 pm Fridays; TNR 167

Please see me after class or make an appointment by email

Teaching Assistant – Leah Bell, lbell100@uwsp.edu

Critical Resources

Online Content

Canvas>>>WLDL 334/534 Ungulate Ecology>>>

Announcements Check weekly for the latest postings on readings, assignments, and exams.

Also look in your email inbox for readings and assignments.

Syllabus Explore the resources, learning outcomes, assessment, course schedule, and other content that will help you do well in this course.

Modules Includes Lecture Materials made available through *PowerPoint* (PPT) files and *MS Word* Study Guide (SGs) files. Additional reading assignments may be available. Content is divided among Biology and Ecology (5 weeks), Species Accounts (6 weeks), and Management (4 weeks).

Quizzes Weekly quizzes and online exams will be posted in this section

Textbook (rental)

Demarias and Krausman, eds. (2000) *Ecology and Management of Large Mammals in North America*, Prentice-Hall. Skim this reference for detailed information and clarification of concepts presented online and in class. I will periodically assign required readings from other sources.

Learning Outcomes

Students successfully completing this course will be able to:

- a) Describe the evolutionary origins and systematics of ungulates.
- b) Understand the role of body size as a central feature of ungulate biology and ecology.
- c) Describe the morphological and physiological adaptations of ungulates relative to food acquisition, predator avoidance, and social behavior.
- d) Describe the competitive interactions (both intraspecific and interspecific) and predator-prey relationships of ungulates.
- f) Identify all North American ungulates and other selected species.
- g) Critically evaluate diverse sources of information about ungulates.
- h) Understand and appreciate diverse viewpoints regarding ungulate conservation and management, especially in Wisconsin and North America.

Course Format

WLDL 334/534 is a hybridized course that engages several sources of information and teaching approaches, including online content, in-class discussions, hands-on labs, field trips, and occasional guest speakers. You will review assigned PPT files, SGs, and readings for the week on your own before coming to class on Thursdays. Weekly quizzes will be available, in part online (5 pts) and are due before 8:00 am on Thursdays. The remainder of the weekly quizzes (5 pts) will be administered at the beginning of each class at 8:00 am on Thursdays. This will be followed by student-led discussions of current events and the assigned materials.

Fridays will continue with discussions, hands-on labs, guest speakers, field trips, and exam reviews when appropriate. In-class participation will be an important component of this course, as all will benefit from external information, experiences, and varying points of view.

Student Assessment

Quizzes – worth 10 points each will be administered in part online (5 pts) before 8:00 am on Thursdays and in class (5 pts) at 8:00 am on Thursdays. Each will address content provided in the associated PPT and SG files that are available on Canvas.

Written Reviews – The Wisconsin Chapter of The Wildlife Society will host an Annual Meeting at the Hotel Mead in Wisconsin Rapids, WI on February 25-27, 2020. Since many students and I will be participating, no class will be held during that week. In lieu of study materials and a quiz, students who participate are assigned to sit in on two presentations on ungulates that are offered during the concurrent sessions at 9:00 am – 12:10 pm on Thursday, February 27. They will write a 1-page review of each presentation. Students who cannot participate are assigned to read two papers on ungulates in the Journal of Wildlife Management and write a 1-page review of each paper. See the grading rubric below for expected content and details for the reviews. Written reviews are due at 12:00 Midnight on Thursday, March 5, 2020.

Exams – two take-home Mid-term Exams and one Final Exam will be issued online during class. All exams are open book, open notes, open everything. I encourage you to work together to come up with answers to exam questions. For essay questions, however, I expect you to write your own answers. No cut and paste responses from a half-dozen students.

Final grades - will be assigned based on points accumulated from a combination of evaluations, including:

- 14 Quizzes (10 points each, minus one)
- 2 Written Reviews (10 points each, see rubric below)
- 2 Mid-term Exams (100 points each, take-home)
- 1 Final Exam (100 points plus 50 points comprehensive, take-home)

Final grades will be based approximately on the following points distribution:

≥93% ---	A	80-82% ---	B-	67-69% ---	D+
90-92% ---	A-	77-79% ---	C+	64-66% ---	D
87-89% ---	B+	73-76% ---	C	<63% ---	F
83-86% ---	B	70-72% ---	C-		

Academic Dishonesty and Late Work Policy

Trust between students and instructors is of paramount importance in academic settings. Academic dishonesty will not be tolerated in the classroom (e.g., cheating on quizzes and exams) or in assignments (e.g., plagiarism). Academic dishonesty will be dealt with to the fullest extent that University policy permits. **All late work, including exams, will lose a full letter grade for every 24 hours after the designated deadline.**

Important Dates

The last day to add/drop without a grade is January 30, 2020. The last day to drop with a “W” is April 3, 2020.

In the Event of an Emergency

Medical emergency - call 911 or use the red emergency phone located in the lobby outside TNR 170. Offer assistance if trained and willing to do so. Guide emergency responders to the victim.

Tornado warning - Avoid wide-span rooms and buildings. TNR 170 is an approved tornado shelter. See www.uwsp.edu/rmgt/Pages/em/procedures/other/floor-plans for floor plans showing severe weather shelters on campus.

Active Shooter – Run, Hide, Fight. If trapped, lock doors and hide, turn off lights, spread out and remain quiet. Follow instructions of emergency responders.

Fire or other emergency requiring evacuation -

1. Pull a fire alarm and leave the building using the stairs and closest exit. Do not use the elevator.
 2. Gather all classmates in the sundial South of TNR. Dial **911** and call Protective Services at **715-346-3456** with information about the emergency and its location.
 3. Ensure you are accounted for by your Faculty. Follow directions of fire, police, and Protective Services staff. Advise responding emergency personnel if anyone requires medical treatment.
- Expanded evacuation may be required depending on the hazards present.

See the UW-Stevens Point Emergency Management Plan at www.uwsp.edu/rmgt for details on all emergency responses at UW-Stevens Point.

Course Schedule

Week of...	Topic	Viewing/Reading Assignments
<i>Section I - Basic Biology and Ecology of Ungulates</i>		
Jan 19 T	Course Introduction	Ppt, SG
Th	Evolution and Diversity	Ppt, SG, Ch 1 (pages 1-17)
F	Nutritional Concepts	Ppt, SG, Ch 6
	Morphology for Herbivory	Ppt, SG, Q1
	LAB - Tooth Eruption/Wear	
Jan 26	Digestion and Rumination	Ppt, SG, Ch 6
Th	Physiological Ecology	Ppt, SG, Q2
F	LAB - Rumen Dissection	
Feb 2	Behavioral Ecology	Ppt, SG, Ch 9,
Th	Sexual Segregation	Ppt, SG, Q3
F	LAB – Camera traps, Scoring	
Feb 9	Resource Selection	Ppt, SG, Ch 9,
Th	White-tailed deer (Leah)	Ppt, SG, Q4
F	LAB – Habitat Field Trip	
Feb 16	Population Ecology	Ppt, SG, Ch 4
Th	Community Ecology	Ppt, SG, Ch 7, 8, Q5
F	DISC - Predator-prey Ecology Mid-term I Review	Mid-term Exam I due 12:00 Midnight, Feb 28
<i>Section II – Species Accounts of North American Ungulates</i>		
Feb 23	Ungulate Research	WCTWS Annual Meeting
Th	Wisconsin Deer Research	Hotel Mead, WI Rapids
F	Discussion	Written Reviews due 12:00 Midnight, Mar 5
Mar 1	White-tailed Deer	Ppt, SG, Ch 29
Th	Human Dimensions (Leah)	Ppt, SG, Ch 10, Q6
F	DISC - Management, DMAP	
Mar 8	Elk	Ppt, SG, Ch 32
Th	Human Dimensions	Ppt, SG, Q7
F	DISC - Management, CL, BRFA	

Mar 15	Spring Break	
Th	No Class	
F	No Class	
Mar 22	Mule Deer, Black-tailed Deer	Ppt, SG, Ch 30
Th	Moose, Caribou, Muskox	Ppt, SG, Ch 26, 28, 31, Q8
F	DISC - Species Preservation	
Mar 29	Pronghorn, Bison	Ppt, SG, Ch 27
Th	Mtn Goat, NA Sheep	Ppt, SG, Ch 22, 23, 24, 25, Q9
F	DISC - Economics	
Apr 5	Collared Peccary, Wild Pigs	Ppt, SG, Ch 21
Th	Wild Horses, Burros	Ppt, SG, Q10
F	DISC - Invasive Species Mid-term II Review	Mid-term Exam II due 12:00 Midnight, Apr 17
Section III- Management of North American Ungulates		
Apr 12	Population Ecology	Ppt, SG
Th	Population Monitoring	Ppt, SG, Q11
F	LAB - Harvest Management	
Apr 19	NA Model Wildlife Conservation	Ppt, SG, Ch 15
Th	WI Deer Hunting Traditions	Ppt, SG, Q12
F	LAB - Firearm Safety	
Apr 26	Resolving Ungulate Conflicts	Ppt, SG
Th	White-tailed Deer	Ppt, SG, Q13
F	LAB - Tools and Techniques	
May 3	Ungulate Diseases	Ppt, SG
Th	White-tailed Deer, CWD	Ppt, SG, Q14
F	LAB - Necropsy	Final Exam Review
May 10	Finals week	Final Exam Due 12:00 Midnight, May 15

Written Review Grading Rubric

Scientific presentation (WCTWS) or paper (JWM) on ungulate ecology.

Responsibility	None	Incomplete	Complete
Title	None (0)	Incomplete (0.5)	Complete (1.0)
Presenter/Authors	None (0)	Incomplete (0.5)	Complete (1.0)
Objectives of presentation/papers	None (0)	Incomplete (1.0)	Complete (2.0)
Critical evaluation of methods	None (0)	Incomplete review of procedures used to achieve objectives (1.0)	Thoughtful review of procedures used to achieve objectives (2.0)
Critical evaluation of results and discussion	None (0)	Incomplete review of analysis and interpretation of data (2.0)	Incomplete review of analysis and interpretation of data (4.0)