

WILDLIFE 458/658 - Wildlife Ecology and Conservation Biology Tentative Syllabus - Fall 2020

"We are into the opening phase of a mass extinction of species. That much is well understood. Hardly understood at all is what the mass extinction will do to the future course of evolution. But we are surely disrupting and impoverishing it in ways that promise to match the greatest set-back to life's course during the past half billion years - and we are doing it in half a century.

- Norman Meyers

"Thanks to science and technology, access to factual knowledge... is destined to become global and democratic... What then? The answer is clear: synthesis. We are drowning in information, while starving for wisdom. The world henceforth will be run by... people able to put together the right information at the right time, think critically about it and make important choices wisely"

- E.O. Wilson

What this course is trying to do

It has become increasingly obvious that an ever mounting human population combined with massive alterations in habitats, are threatening the biota of the planet and altering basic ecosystem functions. The emerging multidisciplinary field of conservation biology seeks to conserve entire systems with all their biological components and processes. Whereas traditional wildlife management often was motivated by utilitarian, single species issues, conservation biology draws on the disciplines of ecology, genetics, biology, geology, chemistry, economics, sociology, and anthropology to seek solutions to the multitude of threats to biodiversity. The distinction between wildlife ecology and conservation biology becomes less and less as the wildlife profession moves rapidly to incorporate a more holistic, ecosystem management philosophy.

Concern also has recently surfaced that wildlife education at the university level has not developed students' ability to synthesize knowledge from a variety of disciplines into coherent conceptual models. Biologists have claimed that many university programs train technicians "for state and federal agencies, but without a conceptual framework in which to practice these skills, management becomes nothing more than a series of random thrusts at whatever happens to be the most current problem." Developing students' critical thinking skills has become vital. **Techniques and practices, while extremely important as tools, are transient. A framework of "facts" is important to have, but it is no substitute for developing an ability to critically evaluate ideas and information.**

Conservation biology is an ideal arena for developing critical thinking skills because it is extremely complex and often deals in shades of gray, rather than black and white. "Right" answers give way to "best" or "most supportable" answers. It requires the synthesis of information from a variety of disparate disciplines to formulate explanations or solutions, and has a variety of "principles" that may act in concert or against each other depending on individual circumstances.

Goals

This course will help you understand the principles that underlie the practice of conservation biology while attempting to develop your critical thinking skills. It will incorporate aspects of traditional ecology, landscape ecology, population genetics, behavioral ecology, policy, and economics. In addition to lecture, there will be a weekly, discussion group. You will be asked to bring a critical, inquisitive mind to every lecture and discussion.

Course objectives

Specifically, the course is designed to provide opportunities for advanced students to:

- 1) become acquainted with the nature and development of biodiversity;
- 2) understand the nature and extent of threats to the biodiversity of the planet.
- 3) become acquainted with the principles of conservation biology and sustainable development - including population genetics, landscape ecology, ecosystem ecology, policy, economics, etc.
- 4) develop critical thinking skills to: investigate problems, issues, or concerns; synthesize basic (albeit scattered and conflicting) biological/ecological information; evaluate the validity, assumptions, and consistency of research and theory
- 5) kindle the intrinsic desire to know and understand.

BASIC COURSE OUTLINE	
I.	What is conservation biology? - an overview
II.	Understanding biodiversity
	A. The value of biodiversity
	B. Species diversity
	C. Genetic diversity
	D. Ecosystem diversity
III.	Threats to biodiversity
	A. Extinction, rarity, and small populations
	B. Habitat loss/degradation
	C. Overexploitation
	D. Exotics
	E. Global climate change
IV.	The practice of conservation biology
	A. Species and landscape approaches
	B. Ecosystem approaches
	C. Protected areas
	D. Sustainable development
	E. Ex situ conservation

Grading

Exams I&II (each @150 pts.)	300
Final exam (comprehensive).....	200
Discussion	400
Check-in activities	100
TOTAL	1000

Grade	%
A	93+
A-	90-92
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D+	67-69
D	63-66
D-	60-62
F	≤59

Graduate students enrolled in WILDLIFE 658 will be required to complete an additional project.

Discussions

We will meet every week in a synchronous online format to discuss current events, readings, a special "problem", view a video, or go over a returned assignment/exam. This interactive period is a chance for you to directly and actively participate in your own learning. Toward this end, you as students eventually will be responsible for planning and leading discussions. You'll work in small groups to develop topics, choose readings, decide the format, and then present. There will be a separate handout giving you more details early in the semester.

Readings

Reading will be one of your primary methods for staying current with the practice of wildlife management or conservation biology once you leave the university. Hence, this course will involve a fair amount of reading. The primary text for this class will be:

Groom, M.J., G.K. Meffe, and C.R. Carroll. 2005. Principles of conservation biology, 3rd ed. Sinauer Associates, Sunderland, Massachusetts. 799pp.

The text is thorough and detailed. Readings from the text are meant to support and extend concepts developed in class. These readings will be posted to Canvas.

Attendance

Material and class attendance are your responsibility. I will try to post versions most of my lecture materials in Canvas. However, it will be extremely difficult to get a thorough understanding of the material without attending (or viewing recordings of) every lecture.



“A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise.”

Aldo Leopold, 1949

Instructor: Jason Riddle, Rm 265 TNR

E-mail: Jason.Riddle@uwsp.edu

Phone: 346-3224

Lecture: 10:00-10:50am T and Th, online

Discussions: 10:00-11:50pm W, online

Office Hours: 1:00-3:50pm W (via Zoom), or by appointment

	Date	Tentative Topic Schedule	Readings
Sep	2	DISCUSSION: Course overview/administration	
	3	Further Introductions	
	8	What is conservation biology?	12-25 (not essays)
	9	DISCUSSION: Team Building	
	10	Biodiversity and values	111-119 (not essays)
	15	Species diversity - basics	31-34, 39-43
	16	DISCUSSION: Instructor Paper Discussion	
	17	Species diversity - measuring	
	22	Species diversity - patterns	43-55
	23	DISCUSSION: Final Group Determination	
	24	Species diversity - (continued)	377-386
	29	Species diversity - (continued)	
	30	DISCUSSION: Instructor Activity	
Oct	1	Ecosystem diversity	36-39
	6	Ecosystem diversity - (continued)	
	7	DISCUSSION: *****EXAM 1*****	
	8	Extinction, rarity, and small populations	63-92, Box 3.2, (not essays)
	13	Extinction, rarity, and small populations - (continued)	
	14	DISCUSSION: Student Planning and Feedback	
	15	Habitat loss and degradation	85, 173-188
	20	Habitat loss and degradation - (continued)	213-234
	21	DISCUSSION: TBD	
	22	Overexploitation	253-272
	27	Overexploitation - (continued)	
	28	DISCUSSION: Students take the lead	
	29	Species invasions	293-314, 316-330
Nov	3	Species invasions - (continued)	
	4	DISCUSSION: Students take the lead	
	5	Applied population biology, PVA's, and metapopulations	423-444, Essay 12.3
	10	Applied population biology, PVA's, and metapopulations - (continued)	
	11	DISCUSSION: Students take the lead	
	12	Species and landscape approaches - ESA	Supplemental Reading
	17	Species and landscape approaches - ESA - (continued)	
	18	DISCUSSION: *****EXAM 2*****	
	19	Ecosystem approaches	467-473 Case Study 13.4
	24	Ecosystem approaches - (continued)	
	25	TBD	
	26	Thanksgiving Break - no class	
Dec	1	Protected areas	509-525
	2	DISCUSSION: Students take the lead	
	3	Protected areas - (continued)	
	8	Ex situ conservation/reintroductions	565-566, Case Study 15.4
	9	DISCUSSION: Students take the lead	
	10	Conservation conclusions?	
	14	FINAL EXAM - Monday, 8am - 10am	

Supplemental Syllabus Information for Online Purposes

I. Expected Instructor Response Times

- I will attempt to respond to student emails within 1-2 business days. If you have not received a reply from me within 2 business days, then please resend your email. In general, I do not check email late at night or on weekends.
- I will attempt to grade written work within 1 week.

II. Student Expectations

In this course you will be expected to complete the following types of tasks.

- communicate via email
- download and upload documents to Canvas
- read documents online
- view online videos
- participate in online discussions
- complete quizzes/tests online
- upload documents to Canvas to submit an assignment

A. Course Structure

This course will be delivered entirely online through the course management system Canvas. You will use your UWSP account to login to the course from the [Canvas Login Page](#). If you have not activated your UWSP account, please visit the [Manage Your Account](#) page to do so.

III. Technology

A. Protecting your Data and Privacy

UW-System approved tools meet security, privacy, and data protection standards. For a list of approved tools, visit this website. <https://www.wisconsin.edu/dle/external-application-integration-requests/>

Tools not listed on the website linked above may not meet security, privacy, and data protection standards. If you have questions about tools, contact the UWSP IT Service Desk at 715-346-4357.

Here are steps you can take to protect your data and privacy.

- Use different usernames and passwords for each service you use
- Do not use your UWSP username and password for any other services
- Use secure versions of websites whenever possible (HTTPS instead of HTTP)
- Have updated antivirus software installed on your devices

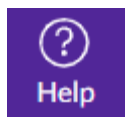
B. Course Technology Requirements

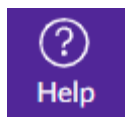
- View this website to see [minimum recommended computer and internet configurations for Canvas](#).
- You will also need access to the following tools to participate in this course.
 - webcam
 - microphone
 - printer
 - a stable internet connection (don't rely on cellular)

C. UWSP Technology Support

- Visit with a [Student Technology Tutor](#)
- Seek assistance from the [IT Service Desk](#) (Formerly HELP Desk)
 - o IT Service Desk Phone: 715-346-4357 (HELP)
 - o IT Service Desk Email: techhelp@uwsp.edu

D. Canvas Support



Click on the  in the global (left) navigation menu and note the options that appear:

Support Options	Explanations
Ask Your Instructor a Question Submit a question to your instructor	Use Ask Your Instructor a Question sparingly; technical questions are best reserved for Canvas personnel and help as detailed below.
Chat with Canvas Support (Student) Live Chat with Canvas Support 24x7!	Chatting with Canvas Support (Student) will initiate a <i>text chat</i> with Canvas support. Response can be qualified with severity level.
Contact Canvas Support via email Canvas support will email a response	Contacting Canvas Support via email will allow you to explain in detail or even upload a screenshot to show your particular difficulty.
Contact Canvas Support via phone Find the phone number for your institution	Calling the Canvas number will let Canvas know that you're from UWSP; phone option is available 24/7.
Search the Canvas Guides Find answers to common questions	Searching the Canvas guides connects you to documents that are searchable by issue. You may also opt for Canvas video guides .
Submit a Feature Idea Have an idea to improve Canvas?	If you have an idea for Canvas that might make instructions or navigation easier, feel free to offer your thoughts through this Submit a Feature Idea avenue.

All options are available 24/7; however, if you opt to email your instructor, s/he may not be available immediately.

- Self-train on Canvas through the [Self-enrolling/paced Canvas training course](#)

IV. Grading Policies

A. Participation

Students are expected to participate in all graded course activities.

B. Complete Assignments

All assignments for this course will be submitted electronically through Canvas unless otherwise instructed.

Assignments must be submitted by the given deadline or special permission must be requested from instructor *before the due date*. Extensions will not be given except under extreme circumstances.

C. Late Work Policy

Be sure to pay close attention to deadlines—there will be no make-up assignments or quizzes, or late work accepted without a serious and compelling reason and instructor approval.

D. Viewing Grades in Canvas

Points you receive for graded activities will be posted to Grades. Click on the Grades link to view your points.

V. Course Policies

A. Netiquette Guidelines

Netiquette is a set of rules for behaving properly online. Your instructor and fellow students wish to foster a safe online learning environment. All opinions and experiences, no matter how different or controversial they may be perceived, must be respected in the tolerant spirit of academic discourse. You are encouraged to comment, question, or critique an idea but you are not to attack an individual. Working as a community of learners, we can build a polite and respectful course community.

The following netiquette tips will enhance the learning experience for everyone in the course:

- Do not dominate any discussion.
- Give other students the opportunity to join in the discussion.
- Do not use offensive language. Present ideas appropriately.
- Be cautious in using Internet language. For example, do not capitalize all letters since this suggests shouting.
- Popular emoticons such as 😊 or / can be helpful to convey your tone but do not overdo or overuse them.
- Avoid using vernacular and/or slang language. This could possibly lead to misinterpretation.
- Never make fun of someone's ability to read or write.
- Share tips with other students.
- Keep an "open-mind" and be willing to express even your minority opinion. Minority opinions have to be respected.
- Think and edit before you push the "Send" button.
- Do not hesitate to ask for feedback.
- Using humor is acceptable

Adapted from:

Mintu-Wimsatt, A., Kernek, C., & Lozada, H. R. (2010). *Netiquette: Make it part of your syllabus*. Journal of Online Learning and Teaching, 6(1). Retrieved from http://jolt.merlot.org/vol6no1/mintu-wimsatt_0310.htm

Shea, V. (1994). Netiquette. Albion.com. Retrieved from: <http://www.albion.com/netiquette/book/>.

B. Handling Online Materials and Class Recordings

Lecture materials and recordings for this class are protected intellectual property at UW-Stevens Point. Students in this course may use the materials and recordings for their personal use related to participation in this class. Students may also take notes solely for their personal use. If a lecture is not already recorded, you are not authorized to record my lectures without my permission unless you are considered by the university to be a qualified student with a disability requiring accommodation. [Regent Policy Document 4-1] Students may not copy or share lecture materials and recordings outside of class, including posting on internet sites or selling to commercial entities. Students also are prohibited from providing or selling their personal notes to anyone else or being paid for taking notes by any person or commercial firm without the instructor's express written permission. Unauthorized use of these copyrighted lecture materials and recordings constitutes copyright infringement and may be addressed under the university's policies, UWS Chapters 14 and 17, governing student academic and non-academic misconduct.

C. Build Rapport

If you find that you have any trouble keeping up with assignments or other aspects of the course, make sure you let your instructor know as early as possible. As you will find, building rapport and effective relationships are key to becoming an effective professional. Make sure that you are proactive in informing your instructor when difficulties arise during the semester so that we can help you find a solution.

D. Understand When You May Drop This Course

It is the student's responsibility to understand when they need to consider unenrolling from a course. Refer to the UWSP [Academic Calendar](#) for dates and deadlines for registration. After this period, a serious and compelling reason is required to drop from the course. Serious and compelling reasons includes: (1) documented and significant change in work hours, leaving student unable to attend class, or (2) documented and severe physical/mental illness/injury to the student or student's family.

E. Incomplete Policy

Under emergency/special circumstances, students may petition for an incomplete grade. An incomplete will only be assigned if there is a personal or family emergency that hinders you from completing the class by the end of the semester. All incomplete course assignments must be completed by the following semester.

F. Inform Your Instructor of Any Accommodations Needed

If you have a documented disability and verification from the [Disability and Assistive Technology Center](#) and wish to discuss academic accommodations, please contact your instructor as soon as possible. It is the student's responsibility to provide documentation of disability to Disability Services and meet with a Disability Services counselor to request special accommodation *before* classes start.

The Disability and Assistive Technology Center is located in 609 Albertson Hall and can be contacted by phone at (715) 346-3365 (Voice) (715) 346-3362 (TDD only) or via email at datctr@uwsp.edu.

Statement of Policy

UW-Stevens Point will modify academic program requirements as necessary to ensure that they do not discriminate against qualified applicants or students with disabilities. The modifications should not affect the substance of educational programs or compromise academic standards; nor should they intrude upon academic freedom. Examinations or other procedures used for evaluating students' academic achievements may be adapted. The results of such evaluation must demonstrate the student's achievement in the academic activity, rather than describe his/her disability.

If modifications are required due to a disability, please inform the instructor and contact the Disability and Assistive Technology Center in 609 ALB, or (715) 346-3365.

G. Commit to Integrity

As a student in this course (and at this university) you are expected to maintain high degrees of professionalism, commitment to active learning and participation in this class and also integrity in your behavior in and out of the classroom.

H. UWSP Academic Honesty Policy & Procedures

Student Academic Disciplinary Procedures

UWSP 14.01 Statement of principles

The board of regents, administrators, faculty, academic staff and students of the university of Wisconsin system believe that academic honesty and integrity are fundamental to the mission of higher education and of the university of Wisconsin system. The university has a responsibility to promote academic honesty and integrity and to develop procedures to deal effectively with instances of academic dishonesty. Students are responsible for the honest completion and representation of their work, for the appropriate citation of sources, and for respect of others' academic endeavors. Students who violate these standards must be confronted and must accept the consequences of their actions.

UWSP 14.03 Academic misconduct subject to disciplinary action.

(1) Academic misconduct is an act in which a student:

- (a) Seeks to claim credit for the work or efforts of another without authorization or citation;
- (b) Uses unauthorized materials or fabricated data in any academic exercise;
- (c) Forges or falsifies academic documents or records;
- (d) Intentionally impedes or damages the academic work of others;

- (e) Engages in conduct aimed at making false representation of a student's academic performance; or
- (f) Assists other students in any of these acts.

(2) Examples of academic misconduct include, but are not limited to: cheating on an examination; collaborating with others in work to be presented, contrary to the stated rules of the course; submitting a paper or assignment as one's own work when a part or all of the paper or assignment is the work of another; submitting a paper or assignment that contains ideas or research of others without appropriately identifying the sources of those ideas; stealing examinations or course materials; submitting, if contrary to the rules of a course, work previously presented in another course; tampering with the laboratory experiment or computer program of another student; knowingly and intentionally assisting another student in any of the above, including assistance in an arrangement whereby any work, classroom performance, examination or other activity is submitted or performed by a person other than the student under whose name the work is submitted or performed.

I. Religious Beliefs

Relief from any academic requirement due to religious beliefs will be accommodated according to UWS 22.03, with notification within the first three weeks of class.