

# Natural Resources 151 – Ecological Basis for Natural Resource Management

## Spring 2022 Semester Syllabus

**Important Note:** This syllabus, along with course assignments and due dates, are subject to change. It is the student's responsibility to check Canvas for corrections or updates to the syllabus. Any changes will be clearly noted in a course announcement or through email.

### Course Information

#### Lecture Instructor Information

**Instructor:** Jason Riddle (coordinating instructor), Wildlife

**Office:** TNR 265

**Office Hours:** Wed 1:00pm – 2:50pm, or by appointment

**Office Telephone:** 715-346-3224

**E-mail:** Jason.Riddle@uwsp.edu (preferred contact)

**Instructor:** Jacob Prater, Soils

**Office:** TNR 274

**Office Hours:** Wednesday 10-11am

**Office Telephone:** 715-346-4180

**E-mail:** jprater@uwsp.edu (preferred contact)

#### Lab Sections and Instructors

Section	Time	Day	Room	Instructor
1	8-9:50AM	Tuesday	TNR 153	Dr. Diane Lueck
2	8-9:50AM	Friday	TNR 153	Shannon Finnerty
3	9-10:50AM	Thursday	TNR 153	Sophie Demchik
4	10-11:50AM	Monday	TNR 153	Nathan Kluge
5	10-11:50AM	Wednesday	TNR 153	Eden Clymire-Stern
6	10-11:50AM	Friday	TNR 153	Eden Clymire-Stern
7	1-2:50PM	Monday	TNR 153	Keenan Foley
8	1-2:50PM	Wednesday	TNR 153	Keenan Foley
9	2-3:50PM	Tuesday	TNR 153	Shannon Finnerty

## Course Catalogue Description

Basic principles of ecology and application of those principles to the management of natural resources. 3 Credits. No Prerequisites or co-requisites. **General Education Designation:** Critical Thinking

## Expected Instructor Response Times

- We will attempt to respond to student emails within 1-2 business days. If you have not received a reply from us within 2 business days, then please resend your email. In general, we do not check email late at night or on weekends.
- Lecture instructors will attempt to grade exams within 1 week.

## Textbook & Course Materials

**Required Text:** Smith, T.M., and R.L. Smith. 2012. Elements of ecology. 8th ed. Benjamin Cummings, Boston.

## Course Purpose

Unlike most introductory ecology courses, the purpose of this course is to introduce you to the principles of ecology that underlie the practice of natural resource management. This is also a Critical Thinking course in the General Education Program. As such, you will begin to develop critical thinking and research skills that will be transferrable to other areas of investigation and problem solving. The 2-hour weekly lab exercises will give you hands-on experience with measurement and data collection, preparation of technical reports, use of library resources, use of computer models, and development of your critical thinking skills. The course is challenging and covers a wide range of topics.

As faculty, our purpose is to help you learn, understand, and think critically about the material as far as possible. Regardless of how we offer it, the material is meaningless unless you actively engage in the learning process. Attendance/participation in lecture and lab is crucial, but seeking to know and understand is more than just showing up and/or viewing videos each week. To do well in this course, you will need to be attentive, do assigned reading, think critically, and ask questions.

We want you to begin to understand how the natural world works so that you can be more informed managers and researchers. Indeed, management and research are two-sides of the same coin of decision-making. The ability to think critically about these processes will enable you to become a more effective citizen of the natural world in which we live and of which we are a part.

## Critical Thinking Learning Outcomes

As previously noted, this course is designated as a Critical Thinking Course in the UWSP General Education Program. Critical Thinking courses should meet the following learning outcomes (CTLOs):

- 1) Recognize critical thinking as a process of identifying, analyzing, evaluating, and constructing reasoning in deciding what conclusions to draw (argumentation) or actions to take (decision-making and problem-solving).
- 2) Identify, analyze, evaluate, and construct reasoning as it is applied to general or discipline-specific questions or issues.
- 3) Communicate the analysis, evaluation, or construction of reasoning orally, visually, or in writing.

## NRES 151 Course Learning Outcomes

The course learning outcomes specific to NRES 151 are as follows:

- 1) Develop fundamental knowledge of the basic principles of ecology.  
Assignments and assessments: Lecture readings, lab exercises, lecture and lab exams.
- 2) Recognize critical thinking as a process of identifying, analyzing, evaluating, and constructing reasoning in deciding what conclusions to draw (argumentation) or actions to take (decision-making and problem-solving).  
Assignments and assessments: Lab/Lecture discussions and online tutorial quizzes [aligns with CTLO 1]
- 3) Use observations, experimentation, and simulation to gain knowledge of the natural world and management outcomes.  
Assignments and assessments: Field trips, weekly lab activities, computer lab simulations, and a semester-long experiment in ecological competition.
- 4) Identify, analyze, evaluate, and construct reasoning regarding the application of basic ecological principles to natural resource management.  
Assignments and assessments: Lab discussions, Library Resource, Assignment, various lab assignments [aligns with CTLO 2]
- 5) Communicate the analysis, evaluation, or construction of scientific reasoning in writing.  
Assignments and assessments: Lab discussions, Scientific Paper Assignment [aligns with CTLO 3].

## Lecture Times/Location & Topic Outline/Schedule

**Lecture Times:** Tuesdays and Thursdays 11-11:50am

**Lecture Location:** TNR 170

Date	Topic	Text	Lecturer
T 25 Jan	Introduction. Key concepts, principles, and critical thinking	Pages 1-14	Prater / Riddle
TH 27 Jan	Science and Critical Thinking		Riddle
T 1 Feb	Introduction to Populations	Pages 150-163	Riddle
Th 3 Feb	Populations	Pages 150-163	Riddle
T 8 Feb	Population growth and carrying capacity	Pages 165-178; 198-199; 202-220	Riddle
Th 10 Feb	Natural selection and fitness	Pages 70-90	Riddle
T 15 Feb	Natural selection and fitness	Pages 70-90	Riddle
Th 17 Feb	<b>EXAM 1</b>		Riddle
T 22 Feb	Predation	Pages 274-289	Riddle
Th 24 Feb	Predation	Pages 274-289	Riddle
T 1 Mar	Herbivory	Pages 289-295	Riddle
Th 3 Mar	Herbivory	Pages 289-295	Riddle
T 8 Mar	Competition	Pages 239-249; 252-270	Riddle
Th 10 Mar	Parasitism	Pages 299-305	Riddle
T 15 Mar	Mutualism	Pages 305-315	Riddle
Th 17 Mar	<b>EXAM 2</b>		Riddle
T 22 Mar	Spring Break	Spring Break	Spring Break
Th 24 Mar	Spring Break	Spring Break	Spring Break
T 29 Mar	Ecosystem development	Pages 358-372	Prater
Th 31 Mar	Ecosystem development: primary succession		Prater
T 5 Apr	Ecosystem development: primary succession		Prater
TH 7 Apr	Ecosystem maintenance: secondary succession		Prater
T 12 Apr	Ecosystem development: secondary succession		Prater

Th 14 Apr	Revisit Carrying Capacity and Ecosystem development	Chapter 4	Prater
T 19 Apr	Ecosystem development: succession and soil development	Chapter 21	Prater
Th 21 Apr	<b>EXAM 3</b>		Prater
T 26 Apr	Nutrient Cycling		Prater
Th 28 Apr	Nutrient Cycling		Prater
T 3 May	Constructal Theory and Energy Transfer	Chapter 22	Prater
Th 5 May	Energy Transfer		Prater
T 10 May	Energy Transfer		Prater
Th 12 May	<b>TBD</b>		Prater
	<b>EXAM 4, 12:30PM – 2:30PM</b>		Prater

## 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
- complete quizzes/tests in person and/or online

## Technology

### 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

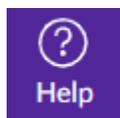
## Course Technology Requirements

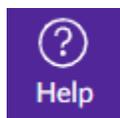
- View this website to see [minimum recommended computer and internet configurations for Canvas](#).
- You may also need access to the following tools to participate in this course in the event that we shift to online instruction.
  - o webcam
  - o microphone
  - o printer
  - o a stable internet connection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

## 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](mailto:techhelp@uwsp.edu)

## Canvas Support



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

Support Options	Explanations
<a href="#">Ask Your Instructor a Question</a> Submit a question to your instructor	Use <b>Ask Your Instructor a Question</b> sparingly; technical questions are best reserved for Canvas personnel and help as detailed below.
<a href="#">Chat with Canvas Support (Student)</a> Live Chat with Canvas Support 24x7!	<b>Chatting with Canvas Support (Student)</b> will initiate a <i>text chat</i> with Canvas support. Response can be qualified with severity level.
<a href="#">Contact Canvas Support via email</a> Canvas support will email a response	<b>Contacting Canvas Support via email</b> will allow you to explain in detail or even upload a screenshot to show your particular difficulty.
<a href="#">Contact Canvas Support via phone</a> 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.

<p><a href="#">Search the Canvas Guides</a> Find answers to common questions</p>	<p>Searching the <a href="#">Canvas guides</a> connects you to documents that are searchable by issue. You may also opt for <a href="#">Canvas video guides</a>.</p>
<p><a href="#">Submit a Feature Idea</a> Have an idea to improve Canvas?</p>	<p>If you have an idea for Canvas that might make instructions or navigation easier, feel free to offer your thoughts through this <a href="#">Submit a Feature Idea</a> avenue.</p>

*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](#)

## Grading Policies

### Graded Course Activities

Exam 1	15%
Exam 2	15%
Exam 3	15%
Exam 4	15%
Lab*	40%
<b>Total</b>	<b>100%</b>

**\* please note that Lab assignments, including details regarding the semester-long research project and report will be provided during your first lab meeting.**

### Participation

Students are expected to participate in all graded course activities.

### 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.

## Late Work Policy

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

## Viewing Grades in Canvas

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

## Letter Grade Assignment

Final grades assigned for this course will be based on the percentage of total points earned and are assigned as follows:

Letter Grade	Percentage
A	93-100%
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	60-66%
F	0-59%

**Important Note:** It is possible that a curve could be applied at the end of the course. The curve would not move anyone into a lower Letter Grade category.

## Course Policies

### 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 in the event that we shift to online instruction:

- 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](http://jolt.merlot.org/vol6no1/mintu-wimsatt_0310.htm)

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

## **Handling Online Materials and Class Recordings if Necessary**

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 also may take notes solely for their personal use. If a lecture is not already recorded, you are not authorized to record our lectures without our 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 instructors' 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.

## **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.

## **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.

## **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.

## **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](mailto: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.*

## **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.

## **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.

### **Masking Policy**

Until further notice from UW-System and/or UWSP, face coverings must be properly worn indoors as well as on University transportation. You may not enter a classroom or remain in a classroom without a properly worn face covering. Failure to comply with this policy is considered student misconduct. Any exemptions must be cleared with DATC and communicated with the instructor prior to the start of class.

### **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.