# NRES 151 Lab – Ecological Basis for Natural Resource Management Fall 2021

**Important Note:** This syllabus represents the general lab schedule and anticipated content sequencing. *These are subject to change as needed.* 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.

Section: 2 TU 9:00AM-10:50AM TNR 153 9 TH 3:00PM-4:50PM TNR 153

Instructor:Sophie DemchikE-mail:sdemchik@uwsp.edu

Office Hours: Zoom TBA

# **Course Information**

### **Critical Thinking Learning Outcomes**

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):

- 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 learning outcomes specific to NRES 151 are as follows:

- Develop fundamental knowledge of the basic principles of ecology. <u>Assignments and assessments:</u> 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). <u>Assignments and assessments:</u> 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.

<u>Assignments and assessments:</u> 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. <u>Assignments and assessments:</u> Lab discussions, Library Resource,

Assignment, various lab assignments [aligns with CTLO 2]

5) Communicate the analysis, evaluation, or construction of scientific reasoning in writing.

<u>Assignments and assessments:</u> Lab discussions, Scientific Paper Assignment [aligns with CTLO 3].

As you can see, the lab experience and assignments are critical to the overall learning outcomes of the course as well as to the alignment of this class with the learning outcomes of the Critical Thinking designation within the General Education Program.

**<u>CONDUCT</u>**: An environment of respect and cooperation is expected during this lab. Comments, questions, and discussions are encouraged, but disruptive behavior will not be tolerated.

**FACE COVERINGS**: At all UW-Stevens Point campus locations, the wearing of face coverings is mandatory in all buildings, including classrooms, laboratories, studios, and other instructional spaces. Any student with a condition that impacts their use of a face covering should contact the Disability and Assistive Technology Center to discuss accommodations in classes. Please note that unless everyone is wearing a face covering, in-person classes cannot take place. This is university policy and not up to the discretion of individual instructors. Failure to adhere to this requirement could result in formal withdrawal from the course.

**<u>ACADEMIC INTEGRITY</u>**: Academic dishonesty in any form will not be tolerated. You will adhere to the Student Academic Standards outlined in Chapter UWS 14 of the Wisconsin Administrative Code

(http://www.uwsp.edu/dos/Documents/CommunityRights.pdf). Cheating or plagiarism related to any of the course assessments will result in a score of zero for that assessment.

**SPECIAL NEEDS**: I will be glad to help if you need special accommodations to succeed in this lab. Please see me as soon as possible if you require special accommodations due to physical limitations, a learning disability, or other issues.

**FIELD TRIPS**: Field trips will go regardless of the weather (except for extreme weather, such as wind or tornado warnings), so be sure to dress accordingly.

**<u>GRADING</u>**: Your overall grade for this course will be based on performance in both lecture and lab. Out of a total of 100 points for the course, 60 points are available in lecture and 40 points are available in lab.

The **Lab Report** is submitted as a <u>*Word document*</u> (.docx) in Canvas.

**Quiz** dates are given in the lab schedule at the end of this syllabus.

The **Lab Final** is taken during your lab time the week of Dec 6-10.

#### Lab Points Breakdown:

Total

Critical Thinking Quizzes (3 x 1.66 pts.)	5 points
Summarizing Sections of Paper Library Assignment	2.5 points 2.5 points
Quizzes (2 x 2.5 pts.)	5 points
Introduction/Section Development	10 points
Lab Report Discussion	5 points
Lab Final	10 points
Lab Points	40 points

# **Tentative Laboratory Schedule**

Fall 2021

Dates	Topic	Location		
Sept. 2-3	NO LAB			
Sept. 7-10	Introduction to lab	Meet in Lab		
Sept. 13-17	Introduction to Hypotheses and Experimental Design; Begin Competition Study	Meet in Lab		
Sept. 20-24	Community structure, diversity, vegetation, and litter invertebrates.	<mark>Meet at</mark> Schmeeckle Reserve		
<mark>Sept. 27 –</mark> Oct. 1	Processing Invertebrates, Data Analysis, and Interpretation of Biotic Diversity	Meet in Lab		
Oct. 4-8	QUIZ 1 Reading a Scientific Paper; Summarizing Sections of a Scientific Paper	Meet in Lab		
Oct. 11-15	Biotic index for assessing water quality of Plover River.	FIELD TRIP: Plover River		
Oct. 18-22	Data analysis and interpretation of aquatic invertebrates.	<mark>Meet in Lab</mark>		
Oct. 25-29	Library Exercise; Making an argument in a Scientific Introduction	Meet in Library for half and in Lab for half		
Nov. 1-5	Species Concept; Methods Discussion	<mark>Meet in Lab</mark>		
Nov. 8-12	QUIZ 2 Conclude greenhouse experiment. Graphing in EXCEL.	<mark>Meet in Lab</mark>		
Nov. 15-19	Population growth and wolves of Isle Royale.	Meet in Computer Lab		
Nov. 22-26	NO LAB-THANKSGIVING			
Nov. 29 - Dec. 3	Keystone Predator. Final Papers Due.	Meet in Computer Lab		
Dec. 6-10	Lab Final.	Meet in Lab		

Section	Time	<mark>Day</mark>	Room	Instructor
1	<mark>8-9:50AM</mark>	Thursday	TNR 153	Shannon Finnerty
<mark>2</mark>	<mark>9-10:50AM</mark>	Tuesday	TNR 153	Sophie Demchik
<mark>3</mark>	<mark>9-10:50AM</mark>	<mark>Friday</mark>	TNR 153	Nathan Kluge
<mark>4</mark>	11-12:50PM	<mark>Friday</mark>	TNR 153	Keenan Foley
<mark>5</mark>	12-1:50PM	Tuesday	TNR 153	William Konieczki
<mark>6</mark>	<mark>1-2:50PM</mark>	<mark>Monday</mark>	TNR 153	<mark>Dr. Jered Studinski</mark>
<mark>7</mark>	<mark>1-2:50PM</mark>	Wednesday	TNR 153	Macayla Greider
<mark>8</mark>	2-3:50PM	<b>Tuesday</b>	TNR 153	Macayla Greider
<mark>9</mark>	3-4:50PM	Thursday	TNR 153	Sophie Demchik

# Lab Sections and Instructors