

**WLDL/WATR 360/560: Wetlands Ecology and Management**  
**Spring Semester 2023**  
**SYLLABUS**

**Course Information:**

Lecture Time: Monday/Wednesday 2:00 pm – 3:15 pm

Lecture Location: TNR 170

Credits: 3

Prerequisite: NRES 250, 251

**Instructor Information:**

Dr. Kyle Herrman

Email: Kyle.Herrman@uwsp.edu (*preferred contact method*)

Office: 263 Trainer Natural Resources Building

Office Phone: 715-346-4832

**Office Hours:**

Time: Thursday 11:00 am – 12:00 pm

If you cannot or do not want to attend office hours in person, then please send me an email and I will send out a Zoom invite for us to meet. If this time does not work for you, then please send me an email and we can arrange a different time to meet.

**Course Objective:**

The objective of this class is to expose students to the basic principles of wetland ecology. This will be accomplished using direct instruction methods (i.e., PowerPoint lectures) but also guest lectures. After completing this course a student will understand how a wetland properly functions and be able to value the services these unique ecosystems provide. We will cover a variety of topics ranging from soils to hydrology to plant biology to wildlife habitat so it is vital that students stay up to date on reading and seek help if they are unsure of course material. **DO NOT** wait until the last minute to get help because all of the material we will cover throughout the semester is comprehensive.

Learner Objectives:

- Identify how a proper wetland functions
- Describe the importance of hydrology in wetland ecosystems
- Implement the basic procedures of the Army Corps of Engineers wetland delineation method
- Describe the unique habitat wetlands provide and identify specific threats wetlands face

**Required text:**

WJ Mitsch and JG Gosselink. 2007. Wetlands (5<sup>th</sup> Edition). John Wiley and Sons, Inc. New Jersey.

**Grades:**

Scale:

A	93-100	C	73-76
A-	90-92	C-	70-72
B+	87-89	D+	67-69
B	83-86	D	63-66
B-	80-82	D-	60-62
C+	77-79	F	<60

Assignments:

	<u>Points</u>	<u>Total</u>	<u>Percent of Total Grade</u>	
			<u>Undergrad</u>	<u>Grad</u>
Exams (4)	25	100	100%	67%
Paper (grad students only)	50	50		33%

**Exams:**

Four exams will be given in class and consist of multiple choice and fill in the blank questions. Because of the nature of wetlands ecology all material covered in the exams will be comprehensive. Students will be allowed 1 8.5" x 11" sheet of paper as notes for the exam. Both sides of the paper can be used. The notes **MUST** be handwritten. No printed text or graphics will be allowed on the note page. Students registered with DATC must have the paperwork sent to me so can make the necessary arrangements for exams.

**Complications related to COVID:**

There is the chance that at some point this semester you will have to miss class due to the following: positive diagnosis for COVID, quarantine notification from Health and Human Services, or feeling ill and awaiting test results. In each of these cases it is critical you do the following: as soon as possible email me, indicate in this email why you are missing class, and the dates of the classes you will be required to miss. After assessing the situation, I will inform you the best way to make up any class time that you have missed. If you are absent for an exam it is critical that you inform form as soon as possible.

**Late Policy:**

Exam times are set in the syllabus, and I expect you to be available to complete the exams during the date specified in the syllabus. If you miss an exam, you **MUST** contact me prior to the exam. If you do not have a medical explanation for missing the exam, you will be able to take a makeup exam.

**Paper (graduate students only):**

The paper will be a 20-page (1.5 line spacing and the page requirement includes figures and tables) literature review on an issue facing wetland ecosystems. In your paper you need to introduce the issue you are describing and provide specific examples of how this will affect wetlands. You will be required to provide 10 citations for this paper. Examples of acceptable citations are textbooks and articles found in peer reviewed journals - online sources are not allowed. Examples for the paper are climate change, invasive species, eutrophication, etc. Prior to Spring Break, you must reach out to me and inform of your topic. At this point, I will provide any further details needed to complete the paper. The due date for the paper is the last Friday of scheduled class by 5pm.

**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 their 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.edumailto:datctr@uwsp.edu](mailto:datctr@uwsp.edumailto: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.

**Commitment 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.

### **Unauthorized sharing of course materials:**

Lecture materials, recordings, and lab manuals for this course 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 are also 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.

**Tentative Schedule (subject to change):**

<b>Lecture</b>	<b>Date</b>	<b>Topic</b>	<b>Reading</b>
1	Jan 23	Wetland valuation	Ch 16; Costanza et al. 1997
2	Jan 25	Wetland history	
3	Jan 30	Classification and types	Pg 55-68; 455-469
	Feb 1		
4	Feb 6	Wetland formation	Pg 227-251; Mitsch et al. 2005
5	Feb 8	Hydrology	Ch 4
	Feb 13		
	Feb 15	<b>Exam I</b>	
6	Feb 20	Redox reactions	Extra Reading
7	Feb 22	Wetland soils	Pg 161-176
8	Feb 27	Wetland Biogeochemistry	Ch 6
	Mar 1		
	Mar 6		
	Mar 8		
	Mar 13	<b>Exam II</b>	
9	Mar 15	Wetland plants	Pg 215-226
	Mar 20	NO CLASS	
	Mar 22	NO CLASS	
10	Mar 27	Macroinvertebrates	
11	Mar 29	Waterfowl ecology (Sedinger)	
12	Apr 3	Herpetofauna ecology	
13	Apr 5	Wetland management	Extra Readings
14	Apr 10	Mead Wildlife Area (Eyers)	
	Apr 12	<b>Exam III</b>	
15	Apr 17	Treatment wetlands	Ch 19
16	Apr 19	Wetland restoration (Gumtow)	Pg 623-639
17	Apr 24	Wetlands on the Lac du Flambeau Reservation (Virden)	
18	Apr 26	Wetland delineation	Extra Readings
	May 1		
	May 3	Everglades video	
	May 8		
19	May 10	Wetland laws and mitigation	Ch 15
<b>Finals Week</b>			
<b>Exam IV: Tuesday May 16 from 12:30 pm – 2:30 pm</b>			