

WLDL/WATR 360/560: Wetlands Ecology and Management
Spring Semester 2020
SYLLABUS

Course Information:

Lecture Time: Monday/Wednesday 8:00 am – 9:15 am

Lecture Location: TNR 120

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 10:00 am - 12:00 pm

Location: 263 Trainer Natural Resource Building

Or by appointment if the assigned hours do not work

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 and in-class exercises. 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 (3rd 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.

Paper (graduate students only):

The paper will be a 20 page (includes figures and tables) literature review on an issue facing wetland ecosystems. More details will be given later in the semester but generally this literature review will require a hypothesis to be introduced and defended using papers found in the wetland literature. Examples of accepted forms of literature are text books and articles found in peer reviewed journals - online sources will not be accepted. Because more than one student may be writing on the same topic **DO NOT** plagiarize. I will catch any form of plagiarism and you will not get away with it!

Attendance:

If you are going to miss a lecture or an exam please contact me as soon as possible. I will provide a make-up exam if the absence is appropriately documented and I am contacted prior to the exam. If you do not have an approved excuse for your absence you will lose one letter grade each day until you take your make-up exam.

Late Policy:

Exams cannot be made up without a valid excuse. If you have not checked with me beforehand the **ONLY** valid excuse would be an official note from a doctor.

Academic Misconduct:

Violations of academic integrity will result in automatic failure of the class and referral to the proper university officials. The work a student submits in a class is expected to be the student's own work and must be work completed for that particular class and assignment. Students wishing to build on an old project or work on a similar topic in two classes must discuss this with the professor. Academic dishonesty includes but is not limited to: cheating on an examination and submitting an assignment as your own work when all or part of the assignment is the work of another without proper citation. Sanctions can be applied whether the violation was intentional or not so please know how to properly cite references for a scientific paper.

For further information regarding UWSP policy please refer to Chapter 14 in the University Handbook (<http://www.uwsp.edu/admin/stuaffairs/rights/rightsChap14.pdf>)

Tentative Schedule (subject to change):

Lecture	Date	Topic	Reading
1	Jan 22	Syllabus and Wetland valuation	Pg 571-604; Costanza et al. 1997
2	Jan 27	Wetland history	Ch 1
3	Jan 29	Classification and types	Ch 4; Pg 725-746
	Feb 3		
4	Feb 5	Wetland formation	Ch 8; Mitsch et al. 2005
5	Feb 10	Hydrology	Ch 5
	Feb 12		
	Feb 17	Exam I	
6	Feb 19	Redox reactions	Reading
7	Feb 24	Wetland soils	Pg 155-164
8	Feb 26	Wetland Biogeochemistry	Pg 171-177; 184-187; Jansson et al. 1994
	Mar 2		
	Mar 4		
	Mar 9	Exam II	
9	Mar 11	Wetland plants	
	Mar 16	NO CLASS	Pg 205-224
	Mar 18	NO CLASS	
10	Mar 23	Macroinvertebrates	
11	Mar 25	Herpetofauna ecology	
12	Mar 30	Waterfowl (Sedinger)	
13	Apr 1	Wetland management	Readings
14	Apr 6	Meade Wildlife Area (Eyers)	
	Apr 8	Exam III	
15	Apr 13	Treatment wetlands	Ch 20
16	Apr 15	Wetland restoration (Gumtow)	
17	Apr 20	Wetlands in the Mississippi River Basin	Mitsch et al. 2001
18	Apr 22	Wetland laws and mitigation	Ch 18
19	Apr 27	Wetland delineation	Readings
	Apr 29		
	May 4	Everglades video	
	May 6		
Finals Week Exam IV: Tuesday May 12 from 2:45 pm – 4:45 pm			