

EXTENDED LEARNING - WETLAND/RIPARIAN ECOLOGY & MANAGEMENT

Course Syllabus

Contact

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Learning Outcomes

Students will:

- Demonstrate a knowledge of the foundational ecological concepts of wetland science,
- Apply these concepts to wetland classification, and delineation,
- Apply these concepts to wetland ecological function and services across multiple wetland classes, with special attention paid to the wetland/riparian complex in the American West,
- Be able to evaluate the range of assessment tools available to assess wetland structure, function and service; and how to choose the proper approach,
- Understand an individual wetland's contribution to the aquatic system within its watershed, and
- Demonstrate knowledge of the foundational concepts of the regulatory framework governing wetlands.

Prerequisites

General Biology, General Ecology.

Course Activities

The course will be structured as a combination of readings, discussions, and on-line videos of short lectures, and weekly assignments. Wetland ecology is a broad discipline that draws upon elements of many physical, chemical, and biological sciences. Interdisciplinary collaboration is critical to our success. Please share your expertise with your colleagues.

The course is arranged in weekly modules with course material (readings, assignments, etc.) made available each week on D2L. All assignments will be turned in to the D2L Dropbox.

Literature Readings and Discussions: The class is primarily organized around readings from text books, primary literature, and management documents. These will be the basis of our class discussions. Participation in discussion is a major portion of the grade. Students are required to pose and answer questions, and share ideas and experiences in the discussion. Across this course each of you will be assigned to facilitate topical discussions, which will include posing a question, or set of questions, and moderating the discussion, and posting a final summary of the discussion. Here are our basic expectations about involvement and timelines for all discussions:

- Weekly modules including readings assignments will be posted on Saturday morning at 12:01 AM
- Begin the week by reading the weekly activity file
- Most of the time discussion boards will open at the same time unless otherwise noted in the weekly activities document.
- For each weekly discussion, you are required to initially respond to the topic by Tuesday (at the very latest!). It is essential that you participate early in the discussion so that we have some momentum and ideas to build on as the week progresses.
- You are required to read your fellow students' postings.
- You are required to post a threaded response to at least one other students' posting by Thursday (at the latest!). This is the essence of the discussion. Give-and-take, sharing of ideas among ALL of us. Please be active - it will enhance the learning experience for all of us.
- Postings must be clearly and professionally written. Please refrain from casual, grammatically-poor writing styles.
- Please draw on your own experiences and opinions in your postings, but please make a dedicated effort to go beyond basic opinions. You will be required to think critically, analyze, synthesize, evaluate, and include relevant references and citations.
- It goes without saying that all discussion posts must be professional and respectful to others.
- Finally, please refer to this basic rubric that we will use to evaluate and grade the discussions. This rubric gives a clear understanding of the expectations of what constitutes quality contributions to discussion. Based on this rubric, we will be asking you to do a self-assessment of your discussion participation at various points during the semester.
- The week's activities will close on that Saturday Night at 11:30 PM

Criteria	Excellent	Good	Satisfactory	Unsatisfactory
Quality of New Threads	Postings are relevant to the topic and provide support for position and arguments	Postings are relevant to the topic	Postings are present but not relevant to the topic	Postings are absent
Quality of Replies	Replies are relevant to the topic and provide factual support for position and arguments	Replies are relevant to the topic	Replies are present but not relevant to the topic	Replies are absent
Use of Readings and Resources	Demonstrates good understanding of topic and outside source materials are properly cited	Appropriate reference made to relevant readings or materials	Limited reference made to relevant readings or materials	No reference made to relevant readings or materials

Assignments: There will be several assignments throughout the semester. They will be due at the end of the weekly module that they are assigned. They are intended to help understand that some of the criteria necessary to determine the presence of a wetland.

Weekly assignments will be due at 11:30 on the Saturday of the assigned week. If you post a question about the assignment, we will get back to you help within 24 hours with a cut-off of 4:30pm on the Friday of the assigned week. (This will be refined across the semester as needed)

Course Schedule (subject to change)

Week	Dates	Topic	Assignments TBA
1	1/10	Course Introduction & Mechanics	
2	1/15	What is a Wetland	
3	1/25	Wetland Classification, & Function: an overview	
4	1/29	Hydrology: Surface water and hydrodynamics	
5	2/5	Hydrology: Ground water and topographic convergence	
6	2/12	Wetland Functions: Hydrology	
7	2/19	Wetland Plants	
8	2/26	Wetland Soils	
9	3/5	Wetland Functions: Biogeochemistry, Productivity & Energy Flow.	
10	3/12	Spring Break	
11	3/19	Wetland Functions: Wetland Plant and Faunal support	
12	3/26	Wetland Federal, State, Local, and Tribal Regulation	
13	4/2	Intro to human interaction	
14	4/9	Ecological Assessment Overview	
15	4/16	Climate perspective	
16	4/23	Ecosystem Services	

Required Text

We will be using several chapters from:

Batzer, D.P. and Sharitz, R.R. eds., 2014. Ecology of freshwater and estuarine wetlands. Univ of California Press. <http://www.ucpress.edu/book.php?isbn=9780520278585>

But we will provide PDFs of those chapters at the beginning of each module in D2L, along with several journal articles pertinent to the week's topic. This class is primarily run as a seminar where we discuss the readings of the week. Therefore, these should be done PRIOR to discussion period.

Evaluation

This course is graded as pass/fail. All students that pass the class will receive a Certification-of-Completion at the end of the semester. Above all you are here to learn. If you engage in the readings, on-line discussions, and complete the assignments, you will have no problem passing the class. If you have problems with any of this we will help. We will be adding grades in D2L so that you can track your progress. These based upon the percentage of total class points that you earn and will be comprised of your participation in course discussion (140 points / 10 points per week), assignments (60), peer-review (50) and semester term paper (150 points). Pass is considered 70% or greater.

Grading Scale:

A 93 - 100	B- 80 - 82	D+ 67 - 69
A- 90 - 92	C+ 77 - 79	D 63 - 66
B+ 87 - 89	C 73 - 76	D- 60 - 62
B 83 - 86	C- 70 - 72	F 59 - 0

Behavioral Expectations

Montana State University expects all students to conduct themselves as honest, responsible and law-abiding members of the academic community and to respect the rights of other students, faculty, staff, and the public to use, enjoy and participate in University programs and facilities.

Collaboration

University policy states that, unless otherwise specified, students may not collaborate on graded material. Any exceptions to this policy will be stated explicitly for individual assignments. If you have any questions about the limits of collaboration, you are expected to ask for clarification

Plagiarism

Paraphrasing or quoting another's work without citing the source is a form of academic misconduct. Even inadvertent or unintentional misuse or appropriation of another's work (such as relying heavily on source material that is not expressly acknowledged) is considered plagiarism. If you have any questions about using and citing sources, you are expected to ask for clarification.