

Master Course Syllabus

For additional course information, including prerequisites, corequisites, and course fees, please refer to the Catalog: <https://catalog.uvu.edu/>

Semester: Spring

Course Prefix: GEOG/IS

Course Title: Wetland Studies

Year: 2025

Course and Section #: 3700 001/ 350R 006

Credits: 3

Course Description

This course will introduce students to the structure and function of wetlands with emphasis on biogeochemistry processes, and wetland mitigation and restoration, policies and regulations. In addition, this course will help students to understand and familiarize with the research methods applied in wetland studies. Students will become familiar with basic and applied concepts in geochemistry, hydrology, soils, and vegetation of natural wetlands.

Course Attributes

This course has the following attributes:

- General Education Requirements
- Global/Intercultural Graduation Requirements
- Writing Enriched Graduation Requirements
- Discipline Core Requirements in Program
- Elective Core Requirements in Program
- Open Elective

Other: *Click here to enter text.*

Instructor Information

Instructor Name: Dr. Weihong Wang

Student Learning Outcomes

Upon successful completion of this course, students will be able to:

1. Define the structure of wetlands including hydrology, biogeochemistry, soils and vegetation adaptations, and explain the function of wetlands and how they influence systems at the watershed and global scale
 2. Articulate biogeochemical processes occurring in wetlands and assess the parameters and methods used in wetland research
 3. Understand the interconnections between human activities and their impact on wetlands, and propose ideas on how to utilize wetlands to solve local water quality issues
 4. Utilize concepts of wetlands mitigation, restoration, and integration of constructed wetlands to address water quality and quantity issues in urban and agricultural landscapes
 5. Evaluate federal and local policies intended to maintain and preserve wetland functions in the landscape
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Course Materials and Texts

Required textbook: Wetlands, 5th edition, by William J. Mitsch, James G. Gosselink.

Course Requirements

Course Assignments, Assessments, and Grading Policy

Grading Scale: This scale represents your percentage of total points

Grade	Percent
A	95-100
A-	90-94
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D+	67-69
D	63-66
D-	60-62
E	0-59

- **Reading Quizzes: 5% of total grade**

These short reading quizzes are designed to keep you on track with the reading so that you are better prepared for the assignments and discussions. Reading introduces fundamental concepts and lays the foundation upon which we will build other class activities. Reading quizzes are open book and open notes. They are not timed, but you need complete them by the specified due dates.

Your one lowest reading grade will be dropped.

- **Homework: 15% of total grade**

There will be homework during the semester. This assignment is developed to further help you to understand the subject in depth.

Homework assignments won't be dropped.

- **Applied Learning Activities: 20% of total grade**

These exercises are designed for to apply and discuss concepts from the readings to real life scenarios. These assignments will have you analyzing data, calculating results, and communicating ideas through writing and other media.

Your two lowest learning activity grades will be dropped,

- **Discussion/Paper critique: 10% of total grade**

Paper critique will be opportunities to explore topics together. Posts to the Paper critique should add significantly to the conversation and support your point of view. It is okay to disagree in a discussion/paper critique. In fact, much learning happens when we disagree. However, we need to be respectful and keep our class a safe place to learn.

Posting two questions on the paper is by Monday midnight. Paper critique summary is due Friday midnight.

Your one lowest grade in this assignment category will be dropped.

- **Group Project Term Paper Abstract and Outline: 5% of total grade**

Based on the project ideas discussed with the instructor, this abstract and outline will help you to setup the structure of your term paper.

- **Group Project Term Paper Write-up: 15% of total grade**

An important part of this class is the term paper, of your choosing, in which you will investigate a particular topic or issue related to wetlands in more detail. The term paper should be an in-depth, thorough discussion of the issue you have chosen. The paper will be about 8 pages in length (single space), including tables, charts, summary and bibliography.

- **Group Presentation: 5% of total grade**

You will present your project to me and to the class from what you have learned and investigated. The presentation is about 15 minutes long and will be judged by me and your classmates.

- **Midterm Exam: 10% of total grade**

Midterm exam is a summative assessment to check your progress halfway through the semester. Midterm exams consist of multiple choice questions, calculations, matching questions, and essay questions. It will be close-book, close-notes and timed. You will have 75 minutes to complete the midterm exam.

The midterm exam won't be dropped.

- **Cumulative Final Exam: 15% of total grade**

The cumulative final exam is the summative assessment for what you have learned during the semester. The cumulative final exam consists of multiple-choice questions, calculations, matching questions, and essay questions. It will be close-book, close-notes and timed. You will have 120 minutes to complete the cumulative final exam.

The cumulative final exam won't be dropped.

Required or Recommended Reading Assignments and General Description of the Subject Matter of Each Lecture or Discussion

Week	Class Plan	Reading Assignment	Other Assignments
Unit 1 (Jan 6-10)	Wetland Importance and Function	Chapter 1, 2	Group project discussion
Unit 2 (Jan 13-17)	Wetland Classification and Wetland of the world	Chapter 3, 8	Quiz, Applied Learning Activity
Unit 3 (Jan 20-24)	Wetland Hydrology	Chapter 4	Applied Learning Activity, Orem Wastewater Treatment Plant Tour
Unit 4 (Jan 27-31)	Wetland Hydrology	Chapter 4	Quiz, Orem treatment plant write-up, paper critique, Homework 1 Due
Unit 5 (Feb 3-7)	Wetland Biogeochemistry	Chapter 5, 6 and additional reading material	Applied Learning Activity

Unit 6 (Feb 10-14)	Wetland Biogeochemistry	Chapter 5, 6 and additional reading material	Applied Learning Activity
Unit 7 (Feb 17-21)	Wetland Biogeochemistry	Chapter 5, 6 and additional reading material	Applied Learning Activity
Unit 8 (Feb 24-28)	Wetland Biogeochemistry and guest lecture	Chapter 5, 6 and additional reading material	
Unit 9 (March 3-7)	Midterm	Chapter 1,2,3,4,5,6, 8	
Unit 10 (March 10-14)	Spring Break - Enjoy!		
Unit 11 (March 17-21)	Trace Metals	Reading packet	Complete the quiz and the assigned readings
Unit 12 (March 24-28)	Trace Metals and Utah Lake Water Quality	Reading packet	Applied Learning Activity on Water Chemistry, Discussion on Utah Lake Restoration proposal
Unit 13 (March 31-April 4)	Human Impact on Wetlands, Wetland Management, and Climate Change	Chapter 14, 17	Quiz, Paper Critique
Unit 14 (April 7-11)	Climate change interview and guest lecture		Homework 2 Due
Unit 15 (April 14-18)	Terms Paper Class Presentation		
Unit 16 (April 21-22)	Term Paper Class Presentation and guest lecture		Class presentation PPT due Group project poster due
Final Exam	Cumulative Final Exam: Monday April 28th from 9 to 10:50		Term Paper writeup due

Late Work

No late work is accepted. All work should be submitted through Canvas. I do understand that life sometimes happens and you will miss an assignment. In order to build in some flexibility in the course, we will drop one assignment in some assignment categories. If something happens, please be in touch over email and we can work together to find a solution. Send me a note the sooner the better if it looks like you are slipping!

Attendance

You should maintain an active presence in this class. This means that you join the class every week, stay engaged during class period, and complete all assignments by the designated due dates.

Required Course Syllabus Statements

Generative AI

*adapted from Temple University (<https://teaching.temple.edu/sites/teaching/files/resource/pdf/Chat-GPT%20syllabus%20statement%20guidance.pdf>) statement on AI in classes.

AI programs are not a replacement for your human creativity, originality, and critical thinking. Writing, thinking, and researching are crafts that you must develop over time to develop your own individual voice. At the same time, you should learn how to use AI and in what instances AI can be helpful to you.

The use of generative AI tools (e.g. ChatGPT, Google Bard, etc.) is permitted in this course for the following activities:

- Brainstorming and refining your ideas;
- Fine tuning your research questions;
- Finding information on your topic;
- Drafting an outline to organize your thoughts;
- Checking grammar and style.

The use of generative AI tools is not permitted in this course for the following activities:

- Impersonating you in classroom contexts, such as by using the tool to compose discussion board prompts/responses assigned to you or content that you put into a Teams/Canvas chat.
- Completing group work that your group has assigned to you, unless it is mutually agreed upon that you may utilize the tool.
- Writing a draft of a writing assignment.
- Writing entire sentences, paragraphs or papers to complete class assignments.

You are responsible for the information you submit based on an AI query (for instance, that it does not violate intellectual property laws, or contain misinformation or unethical content). Your use of AI tools must be properly documented and cited in order to stay within university policies on academic honesty.

Any student work submitted using AI tools should clearly indicate what work is the student's work and what part is generated by the AI. In such cases, no more than 25% of the student work should be generated by AI. If any part of this is confusing or uncertain, please reach out to me for a conversation before submitting your work.

Using Remote Testing Software

This course does not use remote testing software.

This course uses remote testing software. Remote test-takers may choose their remote testing locations. Please note, however, that the testing software used for this may conduct a brief scan of remote test-takers' immediate surroundings, may require use of a webcam while taking an exam, may require the microphone be on while taking an exam, or may require other practices to confirm academic honesty. Test-takers therefore shall have no expectation of privacy in their test-taking location during, or immediately preceding, remote testing. If a student strongly objects to using test-taking software, the student should contact the instructor at the beginning of the semester to determine whether alternative testing arrangements are feasible. Alternatives are not guaranteed.

Required University Syllabus Statements

Accommodations/Students with Disabilities

Students needing accommodations due to a permanent or temporary disability, pregnancy or pregnancy-related conditions may contact UVU [Accessibility Services](#) at accessibilityservices@uvu.edu or 801-863-8747.

Accessibility Services is located on the Orem Campus in BA 110.

Deaf/Hard of Hearing students requesting ASL interpreters or transcribers can contact Accessibility Services to set up accommodations. Deaf/Hard of Hearing services can be contacted at DHHservices@uvu.edu

DHH is located on the Orem Campus in BA 112.

Academic Integrity

At Utah Valley University, faculty and students operate in an atmosphere of mutual trust. Maintaining an atmosphere of academic integrity allows for free exchange of ideas and enables all members of the community to achieve their highest potential. Our goal is to foster an intellectual atmosphere that produces scholars of integrity and imaginative thought. In all academic work, the ideas and contributions of others must be appropriately acknowledged and UVU students are expected to produce their own original academic work.

Faculty and students share the responsibility of ensuring the honesty and fairness of the intellectual environment at UVU. Students have a responsibility to promote academic integrity at the university by not participating in or facilitating others' participation in any act of academic dishonesty. As members of the academic community, students must become familiar with their [rights and responsibilities](#). In each course, they are responsible for knowing the requirements and restrictions regarding research and writing, assessments, collaborative work, the use of study aids, the appropriateness of assistance, and other issues. Likewise, instructors are responsible to clearly state expectations and model best practices.

Further information on what constitutes academic dishonesty is detailed in [UVU Policy 541: Student Code of Conduct](#).

Equity and Title IX

Utah Valley University does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, age (40 and over), disability, veteran status, pregnancy, childbirth, or pregnancy-related conditions, citizenship, genetic information, or other basis protected by applicable law, including Title IX and 34 C.F.R. Part 106, in employment, treatment, admission, access to educational programs and activities, or other University benefits or services. Inquiries about nondiscrimination at UVU may be directed to the U.S. Department of Education's Office for Civil Rights or UVU's Title IX Coordinator at 801-863-7999 – TitleIX@uvu.edu – 800 W University Pkwy, Orem, 84058, Suite BA 203.

Religious Accommodation

UVU values and acknowledges the array of worldviews, faiths, and religions represented in our student body, and as such provides supportive accommodations for students. Religious belief or conscience broadly includes religious, non-religious, theistic, or non-theistic moral or ethical beliefs as well as participation in religious holidays, observances, or activities. Accommodations may include scheduling or due-date modifications or make-up assignments for missed class work.

To seek a religious accommodation, a student must provide written notice to the instructor and the Director of Accessibility Services at accessibilityservices@uvu.edu. If the accommodation relates to a scheduling conflict, the notice should include the date, time, and brief description of the difficulty posed by the conflict. Such requests should be made as soon as the student is aware of the prospective scheduling conflict.

While religious expression is welcome throughout campus, UVU also has a [specially dedicated space](#) for meditation, prayer, reflection, or other forms of religious expression.