



WETLAND ECOLOGY AND MANAGEMENT

AG 438 01E / AG 438L 01E

BSC 438 01E / BSC 438L 01E

FALL 2025

Instructor: Dr. Pedro M. Chavarria
Course Location: AG/ET 255
Course Hours: TTH 11:00 am - 12:15
Office Location: AG/ET 154
Office Hours: By appointment, schedule by e-mail
Office Phone: 903.886.5615 (E-mail preferred)
University Email Address: Pedro.Chavarria@tamuc.edu
Preferred Form of Communication: e-mail

COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings

Textbook(s) Required: Mitsch, W.J., Gosselink, J.G. Wetlands. 5th Edition. J. Wiley & Sons, Inc., 2015. NOT REQUIRED.

Textbook is accessible via Library online:

https://tamuc.primo.exlibrisgroup.com/permalink/01TEXAM_COM/10dtg5/cdi_proquest_ebookcentralchapters_1895927_6_11

Supplemental Materials: Presented by the instructor or on myleoonline.tamuc.edu

Course Description

This class will address the ecology of wetlands from a systems approach, starting first with what defines a wetland both legally and functionally, and covering important and defining principles of hydro-period, soils, wetland plants, wetland succession, delineation, and wetlands as wildlife habitat. The lab will immerse students in field exercises ranging from wetland plant collection and identification, and wetland bird identification. Students enrolled in this course must be willing to attend field trips when and where feasible. Credits: 4 sch

The syllabus/schedule are subject to change.

Student Learning Outcomes

1. To understand the importance of wetlands and policy that protect them.
2. To understand principles of wetland ecology and management and their application. To develop a habitat management plan.
3. To develop communication skills and clarity to present ideas.

COURSE REQUIREMENTS

Minimal Technical Skills Needed

You must be proficient in navigating myleoonline.tamuc.edu, using Microsoft Word and PowerPoint, e-mailing your instructor, writing papers, and opening .pdf documents. Basic use of Google Maps / GoogleEarth installed on PC or Mac laptop.

Instructional Methods

You will be required to read the book chapters, supplemental reading material, and instructional PowerPoint slides. Quizzes and exams will cover the material presented to you via myleoonline.tamuc.edu, and information in the text. There will weekly labs held on Thursdays from 1:00-3:50 pm. Some of these will be to the local wetlands on campus and others will require transport to public lands (e.g. TPWD).

GRADING

Final grades in this course will be based on the following scale:

A = 90%-100%; B = 80%-89%; C = 70%-79%; D = 60%-69%; F = 59% or Below

Assessments

This predominantly lecture-based course includes some field trip /labs and is based on a 1000 point scale. The points are earned by performance on 2 exams (20%), group projects and labs, field trip notes, a field methods practical exam (10%), a cumulative final exam (15%), In-class quizzes or group assignments (7.5%), and a final research paper and oral presentation (20%). There will be mandatory field trips where students practice field methods. . The breakdown is as follows:

Assignment	Points
Lecture Exams 2	100 each → 200
Field trip notes and assignments	275
Field methods practical (lab exam)	100
Weekly pop quizzes / take-home quizzes/ homework (point range 5-10 pts. each quiz)	75
Research paper and presentation	100 + 100 → 200
Final Exam	150

Attendance and Participation:

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Each student is expected to attend all lectures and participate in all discussions. This course meets in-person in the traditional lecture format.

Your “attendance” grade will be based on logging in daily and participation. If you do not attend (participate) in class, you cannot receive credit for attendance or participation. You must participate in class discussions posted on forums on our course shell in myLeo. There will be a total of 10 forum discussions posted to which you must respond to the week’s topic or questions and responses provided by your instructor and classmates.

Attendance Radar APP

In-class attendance will be taken by using the Attendance Radar App (<https://codific.com/student-attendance-radar/>). Students will be required to download the App to their mobile devices. Instructions for how to download and use the App are provided in the following video tutorial link: https://youtu.be/VROO_w9mKUc. Your instructor will create and provide an online classroom to verify through the Codific Attendance Radar website. It is each student’s responsibility to log in to the App during each day of lecture to verify their daily attendance.

Wildlife Management Field Trips / Labs:

There will be weekly field trip labs located close to campus. Some of these will involve touring different areas managed by conservationist stakeholders on private or public lands. You will be required to take notes on these trips and formulate a “Wetland Management Plan” with recommendations based on the conditions of the habitat and intended conservation goals for target and/or non-target wildlife. The format of these papers will consist of 8-10 page reports which include a short synopsis, detailed boundary maps, species lists, photo documentation, preliminary analysis, habitat recommendations and summary. Some short field trips near campus will expose students to sampling techniques and how to conduct habitat assessments. Students must wear shoes and clothing suitable for travel outdoors in the field.

Field methods practical:

There will be 1 field methods “lab exam” in which you will need to identify field equipment, how it is applied in the field, and proper methods for analysis using those tools and techniques.

Tentative Course schedule: *(adjustments may be made later at instructor’s discretion)

Week	Day	Lecture Topic	Assigned Readings
1		Introduction, Syllabus, Expectations; Introduction to wetlands and field sites	Online
		Wetlands: humans use and science	Online
2		Wetlands definitions	Online
		Lab: ETAMU Wetland tour	Online
3		Wetlands of the world	Online

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		Lab: Wetland GIS	Online
4		Wetland hydrology	Online
		Lab: Field Trip	Online
5		Wetland soils	Online
		Lab: Soils sampling	Online
			Online
6		Wetland biogeochemistry	Online
		Lab: Geomorphology	Online
			Online
7		Wetland vegetation and succession	Online
		Lab: Wetland vegetation survey	Online
			Online
8		Wetland classification	Online
		Lab: Wetland delineation	Online
			Online
9		Human impacts and management of wetlands	Online
		Lab: Wetland impact survey	Online
			Online
10		Wetland laws and protection	Online
		Lab: TBD	Online
			Online
11		Wetlands and climate change	Online
		Lab: TBC	Online
			Online
12		Wetlands creation and restoration	Online
		Lab: Field trip	Online
			Online
13		Wetlands and water quality	Online
		Lab: Water sampling	Online
		Thanksgiving break	
14		Types of wetlands: (tidal marshes, mangrove swamps, freshwater marshes, freshwater swamps, riparian ecosystems)	
		Student Research Presentations	
15		Student Research Presentations	
		Student Research Presentations	
		Final exam review	
16		(12/11-12/13) Final exam (15%) TBA	

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TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:

<https://community.brightspace.com/s/article/Brightspace-Platform-Requirements>

LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

YouSeeU Virtual Classroom Requirements:

<https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements>.

You will be required to download the Codific Attendance Radar App (<https://codific.com/student-attendance-radar/>) to your mobile devices for in-class attendance verification. If you do not have a mobile device, you will need to consult with the instructor with your student ID to verify your attendance in-person.

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your Instructor first.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

<https://community.brightspace.com/support/s/contactsupport>

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Interaction with Instructor Statement

Student Success

To be successful in my class:

- Check the course daily (e-mail and myLeo D2L) and read all announcements.
- Some changes to the course content, including deadlines to assignments, may occur during the semester. These announcements will first be made in-class during lectures. Not all announcements and changes to deadlines may be posted immediately to myLeo online. It is the student's responsibility to check with the instructor, preferably by e-mail, if a class is missed.
- Read and respond to course email messages as needed; please understand that I will respond as quickly as conveniently as possible. Sometimes I will respond to messages late into the evening, but generally expect me to reply within regular business hours
- Because it may take me a while to immediately respond to your e-mail, I recommend you build a connection with peers in your class in which you can confide and rely (i.e. "study buddy") to keep you informed of the changes to the course schedule and material in case you miss a class.
- Complete assignments by the due dates specified; If you have extenuating circumstances that prevent you from meeting a deadline, please let me know ahead of time so I can consult with you about necessary accommodations or make-up opportunities.
- Communicate regularly with your instructor (office hours) and peers. I am very understanding of situations that may arise in the academic environment or in our personal lives which can create challenges to your performance. Please let me know what's going on so I can provide reasonable opportunities to help you recover and/or stay on track with the course.
- Create a study and/or assignment schedule to stay on track
- If you have any concerns regarding course content, need clarification on grading, or other matters related to the course, please make an appointment with your instructor to try to resolve the issue with the instructor first. If you find that the issue at hand cannot be resolved with the instructor after first consulting with the instructor, then feel free to seek support from the Chair of the department.
- Penalty enforcement (I reserve the right to adjust your grade for violation of the minimum expectations).
- Make-up assignments will only be given if arrangements are made with the instructor before missing the scheduled assignment. A documented excuse acceptable by the university standards will be required.
- If you miss class because of medical reasons, you will need to verify your illness through the TAMUC Student Health Services office (<https://www.tamuc.edu/student-health-services/>) or Student Disability Services office (<https://www.tamuc.edu/student-disability-services/>). A confirmation note (e-mail) from staff from either office is needed to make accommodations for missed assignments.
- Otherwise, missing assignments will be counted as zeroes in the overall grade computation.

I want you all to succeed in my courses and in life beyond your graduation. Schedule a time to come and chat with me formally or informally to discuss your interest in wildlife conservation and what kind of things you are expecting to learn while a student at TAMUC. I will make the strongest effort to adapt the degree program to the needs of our students and make the learning experience fun and exciting!

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COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the [Student Guidebook](#).

<http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: <https://www.britannica.com/topic/netiquette>

TAMUC Attendance

For more information about the attendance policy please visit the [Attendance](#) webpage and [Procedure 13.99.99.R0.01](#).

<http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf>

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

[Undergraduate Academic Dishonesty 13.99.99.R0.03](#)

[Undergraduate Student Academic Dishonesty Form](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/documents/13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf>

[Graduate Student Academic Dishonesty Form](#)

<http://www.tamuc.edu/academics/graduateschool/faculty/GraduateStudentAcademicDishonestyFormold.pdf>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

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Use of Artificial Intelligence (AI) Course Policy

Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.

Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors' guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

13.99.99.R0.03 Undergraduate Academic Dishonesty
13.99.99.R0.10 Graduate Student Academic Dishonesty

Students with Disabilities-- ADA Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce
Velma K. Waters Library Rm 162
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
Email: studentdisabilityservices@tamuc.edu

Website: [Office of Student Disability Resources and Services](http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/)
<http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

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Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.

Web url:

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

A&M-Commerce Supports Students' Mental Health

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit www.tamuc.edu/counsel

The instructor reserves the right to modify this syllabus during the semester, if needed. The instructor also reserves the right to extend credit for alternative assignments, projects, or presentations. Some elements of grading may be delegated to a teaching assistant for this course.

The syllabus/schedule are subject to change.