

WIS 4443C
Wetland Wildlife Ecology
4 Credits
Spring 2024

Course Description:

The course is designed to provide students with a basic understanding of the terminology, history, and ecological concepts associated with wetland ecology and the wildlife species that are dependent on wetlands. To this end we will focus on answering the questions:

- What are wetlands?
- What make wetlands unique and important?
- What are the ecological processes that make them unique?
- How do we classify wetland types?
- What are the wildlife species most commonly associated with and dependent upon wetlands?
- How do we identify these wetland wildlife species?

Fieldtrips will be used to view different types of wetlands and the wildlife associated with them. Through in person lectures, recorded lectures, fieldtrips, and discussions students will explore the integration of ecological principles with political and economic realities which are necessary for the management, restoration, and conservation of wetlands and the wildlife they support.

Student Learning Outcomes Lecture and Laboratory:

Following this course, a student should understand:

- The structure, function, and importance of major wetland types
- The types of animals that use wetlands; their abundance and distribution within and among wetlands; and their ecological roles and relationships
- Various management practices used in wetlands and challenges facing the future of wetlands

Following this course, a student should be able to identify and classify representatives of wetland wildlife groups (birds, amphibians, mammals).

Credit Hours:

This is a 4 credit "C" course, which means there is a lab associated with this course. Three credits of lecture equate up to three hours (150 min. + breaks) of contact time per week, and one credit of lab equates up to three hours of contact time per week. This totals 93 hours of contact time throughout the entire semester. We will have 3 hours of lectures per week, and lab hours will be distributed across Tuesday class periods (wildlife identification) and full day Saturday field labs (double lab periods). One or two of your lectures each week will be recorded with a required quiz. Additionally, for each hour of contact time in class, the student is expected to spend at least 2-3 hours per week out of class for assignments, study time, and class/lab preparation, viewing videos.

Instructor:

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Office hours: Monday 9-11 or by appointment

Instructor Office Hours and Communication:

Anytime by cell phone and email. Or, in person or zoom Monday's 9-11 Or, by appointment.

I will available Monday's 9-11 unless I am traveling. I have an open-door policy but to make sure I'm available call or make an appointment. When I'm not available in the office cell phone calls are welcomed. Don't hesitate to call and leave a message if you get my voicemail – I will get back to you as soon as possible.

The preferred method of communication is by Canvas email. Gina or I will respond within 48 hours. For technical issues and questions regarding the navigation and use of Canvas: Contact the UF Help Desk online at helpdesk@ufl.edu or by phone (352) 392-HELP – select option 2. On occasion, we will send an email via Canvas regarding updates to the syllabus, clarifications of assignments, or changes in due dates. You should be checking your email on a regular basis.

Textbooks:

Required: Priceless Florida (Natural Ecosystems and Native Species)
Ellie Whitney, D. Bruce Means, and Anne Rudloe

Required: A field guide for bird identification.

Field guide recommendations:

National Geographic Society, 1987. Field Guide to the Birds of North America.

Robbins et al., 1983. Birds of North America: A Guide to Field Identification.

Highly Recommended: WETLANDS, 5th Edition

William J. Mitsch and James G. Gosselink

Lecture and Lab:

Tuesday. 5 – 8 pm Central, Building 4800, Room 4822

Lecture and Lab are integrated in this class, and you receive a single grade which reflects both lab and lecture material. Most weeks (unless otherwise notified) you will spend the first 30 minutes to 1 hour of class time in “lab” learning to identify wetland wildlife including waterfowl, water birds and amphibians. An in-person laboratory quiz will be given at the beginning of each class. The laboratory quiz will cover identification of wildlife species and characteristics used in classification and identification.

As much as one hour of lecture material will be recorded and available through canvas. Lecture recordings (where applicable) and quizzes will be posted for each week in the respective Module in Canvas. Mandatory class meetings will occur on Tuesdays at 5:00 – 8:00 pm (Central) to discuss additional lecture material and/or conduct outdoor mini labs.

Students are expected to actively participate during the class meetings. Be prepared to answer questions, and work on group activities. Where applicable, students must watch the recorded lectures and complete the weekly lecture quiz online before class on Tuesdays at 5 PM (Central).

Mandatory field labs will occur off-campus on Saturdays throughout the semester (see Schedule below for dates) to reinforce and strengthen the concepts learned in class through hands-on activities. The field labs will be conducted at several locations off-campus. Whenever field (outdoor) labs are scheduled, wear appropriate clothing (long pants and sturdy shoes) and bring water, sunscreen, and insect spray. Also, be prepared to take notes (clipboard, pen, and paper, or audio recorder) and pictures (if you have a camera). Outdoor lab work is conducted as scheduled regardless of weather conditions. Never assume lab is canceled. **FIELDTRIP ATTENDANCE IS MANDATORY.**

Friday and Saturday Fieldtrips:

- 3 - 4 full day field trips
- Short fieldtrips may also occur during Tuesday night class hours.

Class Notes:

Available on e-learning - Canvas

Laboratory slides and Power Point slides for wildlife identification also available on E-learning; Print outs will not be provided. You must print your own set of lecture notes and Power Point slides.

Evaluation:

To be able to assess how well we achieve our goals and objectives; several evaluation methods will be used. Because students vary in the evaluation tools that best demonstrate their knowledge and understanding my assessment will be based on test scores (test will include both multiple choice, short answer and long answer questions), participation in discussions and field experiences, and written synthesis of field exercises.

Grades and Grade Points

Letter grades will be assigned as follows based on percent score:

A (93-100), A⁻ (90-92), B⁺ (86-89), B (83-85), B⁻ (80-82), C⁺ (76-79), C (73-75), C⁻ (70-72), D⁺ (66-69), D (63-65), D⁻ (60-62), E (<60)

For information on current UF policies for assigning grade points, see <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Points: **Lecture Exams: 200**
 (2 @ 100 pts each)
 Final exam: 100
 (Not comprehensive)
 In-Class Participation: 25
 Not just attendance but participation
 Class Exercise and Presentation: 75
 Management plan and presentation.
 See class exercise attached for details.
 Laboratory Quizzes: 100
 (11 @ 10 pts each. Lowest quiz score dropped)
 Online Quizzes lectures: 50
 (10-11 @ 5 pts each)
 Field Trips: 150
 – **10 points** for each field trip for attendance and participation
 – **110 points** total for field trip write-ups; details will be provided at
 the time of each fieldtrip.

Total Points: 700 points

Late Work Policy

Most assignments and quizzes are turned in electronically via Canvas. Refer to the syllabus schedule or Canvas assignments tab for due dates and times. Without an excused absence, students will not have the option to complete a quiz after the established close date/time. Late work will be penalized 10% for the first day and 5% per day thereafter (weekend days count too!).

Make-up exams will be given only when circumstances beyond a student's control (e.g., illness) are reported and when possible documented (e.g., doctors note). I should be notified of your circumstance before the exam or immediately after the exam. Arrangements for a make-up exam should be made at that time. The make-up exam should be taken **no later than 1 week** after the initial exam unless valid scheduling conflicts make this impossible.

Fieldtrips are **REQUIRED**. If a circumstance beyond your control occurs, you must let me know immediately (before the trip is preferred). The optional assignment (generally an 8-10-page paper on a subject that I feel best substitutes for the field trip) can be used as a makeup for a missed fieldtrip only with my permission (contingent on legitimate excuse for missing required fieldtrip). Write-ups from fieldtrips will be due 1.5 weeks after the trip (the second-class period) unless otherwise indicated.

Attendance and Make-Up Work

Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at: <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>.

Online Course Evaluation Process:

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide professional and respectful feedback on the quality of instruction in this course using a standard set of university and college criteria. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at: <https://gatorevals.aa.ufl.edu/students/> . Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/> . Summaries of course evaluation results are available to students at: <https://gatorevals.aa.ufl.edu/public-results>.

Academic Honesty:

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code> .

Plagiarism Policy:

Do not submit work previously submitted to another class to fulfill requirements of this class. All work submitted through Canvas will be evaluated by the software **Turnitin**. **Turnitin** compares student submission to billions of websites and other papers submitted and highlights exact matches. Instructors will verify if students obtained their information from appropriate sources and properly cited those sources.

UF Plagiarism Policy: <http://regulations.ufl.edu/chapter4/4041.pdf>

Plagiarism Definition: A student shall not represent as the student's own work all or any portion of the work of another. Plagiarism includes but is not limited to:

- Quoting oral or written materials including but not limited to those found on the internet, whether published or unpublished, without proper attribution
- Submitting a document or assignment which in whole or in part is identical or substantially identical to a document or assignment not authorized by the student
- Unauthorized use of materials or resources
- Prohibited collaboration or consultation
- Submission of paper or academic work purchased or obtained for an outside source

Software Use:

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

Inclusive Learning Environment

This course embraces the University of Florida's Non-Discrimination Policy, which reads,

The University shall actively promote equal opportunity policies and practices conforming to laws against discrimination. The University is committed to non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, gender identity and expression, marital status, national origin, political opinions or affiliations, genetic information and veteran status as protected under the Vietnam Era Veterans' Readjustment Assistance Act.

If you have questions or concerns about your rights and responsibilities for inclusive learning environment, please see the instructor or refer to the Office of Multicultural & Diversity Affairs website: <http://multicultural.ufl.edu>.

Services for Students with Disabilities

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation

0001 Reid Hall, 352-392-8565, <https://disability.ufl.edu>

Student Life, Wellness, and Counseling Help

Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. UF CALS offers direct mental health counseling FREE OF CHARGE for students at distance locations (REC's) through an embedded counselor – Dr. Philip Daniels. He has a welcome video which can be viewed here: [Dr. Daniels Welcome Video](#). If you are a student at a UF/IFAS Research and Education Center, you will be directed to Dr. Daniels for consultation and referral services. Email communication has limited confidentiality and is reserved for scheduling, pdaniels@ufl.edu if you are in need of an appointment, please email or call Dr. Daniels directly (352) 392-1575.

Student Complaints:

- Residential Course: <https://sccr.dso.ufl.edu/policies/student-honor-code-studentconduct-code/>.
- Online Course: <http://www.distance.ufl.edu/student-complaint-process>

In-Class Recording:

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

Laboratory Schedule

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|---------------------|---|
| Week 1 | Introduction, Waterfowl Identification |
| Week 2 | QUIZ 1 Waterfowl Identification, in person |
| Week 3 | QUIZ 2 Waterfowl Identification, in person |
| Week 4 | QUIZ 3 Waterfowl Identification, in person |
| February 2-3 | FIELD TRIP – St. Marks and Wakulla Read: Priceless Florida, Ch. 11, 13, 14, 16-19 before the trip. |
| Week 5 | QUIZ 4 Waterfowl Identification, in person |
| Week 6 | QUIZ 5 Waterfowl Identification, in person |
| Week 7 | No Lab – Exam 1 |
| Week 8 | QUIZ 6 Waterfowl & Waterbird Identification, in person Write-up St. Mark's and Wakulla due Feb. 23 at 5 PM |
| March 2 | FIELD TRIP – Wetland Delineation |
| Week 9 | QUIZ 7 Waterbird Identification, in person |
| Week 10 | SPRING BREAK |
| Week 11 | QUIZ 8 Waterbird & Amphibian Identification, in person Write-up Wetland Delineation due March 22 at 5 PM |
| March TBA | FIELD TRIP – Area Wetlands at Eglin AFB |
| Week 12 | QUIZ 9 Amphibian Identification, in person |
| Week 13 | No Lab – Exam 2 |
| April TBA | FIELD TRIP - Mobile Bay |
| Week 14 | QUIZ 10 Amphibian Identification, in person Write-up Area Wetlands Eglin AFB due April 12 at 5 PM |
| Week 15 | QUIZ 11 Amphibian & Reptile Identification, in person Write up for Mobile Bay due April 19 at 5 PM |

General Lecture Overview

| Date | Topic | Readings Wetlands | Readings Priceless Florida |
|---------------|--|--|----------------------------------|
| Week 1 | Syllabus and Waterfowl | | |
| Week 2 | Introduction and history | Ch. 1 | |
| Week 3 | Wetland Definition; Wetland Types and Classification; Coastal/Tidal Wetland Types and Classification | Ch. 2, 3 (p. 48-67), 8,13 (p. 455-464) | Ch. 8,16,18 |
| | <i>Recorded lecture</i> Online Lecture Quiz due Jan 23 at 5 PM | | |
| Week 4 | Coastal Wetland; Development and Loss; Ecosystem Service and Values; Wetland Status and Human Impacts | Ch. 14,15,16 | |
| | <i>Recorded lecture</i> Online Lecture Quiz due Jan 30 at 5 PM | | |
| Week 5 | Coastal Wetland; Development and Loss; Ecosystem Service and Values; Wetland Status and Human Impacts | Ch. 14,15,16 | |
| | <i>Recorded lecture</i> Online Lecture Quiz due Feb. 6 at 5 PM Subject for class exercise due Feb. 1 at 5 PM | | |
| Week 6 | Wetland Hydrology Part 1 Delineation Concepts | Ch. 4 | Ch. 9,11,12,13,14 |
| | <i>Recorded lecture</i> Online Lecture Quiz due Feb. 13 at 5 PM | | |
| Week 7 | Exam 1 – Feb. 20 | | |
| Week 8 | Wetland Hydrology Part 2 | | |
| | <i>Recorded lecture</i> Online lecture quiz due Feb. 27 at 5 PM | | |
| Week 9 | Wetland Soils and Biogeochemistry | Ch. 5, 6 | |
| | <i>Recorded lecture</i> Online lecture quiz due March 5 at 5 PM Literature review for class exercise due March 1 at 5 PM | | |

| Date | Topic | Readings Wetlands | Readings Priceless Florida |
|----------------|--|----------------------|----------------------------------|
| Week 10 | SPRING BREAK | | |
| Week 11 | Wetland Presentations – March 19 | | |
| Week 12 | Plant adaptations and Wetland development | Ch. 7 | |
| | <i>Recorded lecture</i> Online lecture quiz due March 26 at 5 PM | | |
| Week 13 | Exam 2 – April 2 | | |
| Week 14 | Amphibians and Reptiles | | |
| | <i>Recorded lecture</i> Online lecture quiz due April 9 at 5 PM | | |
| Week 15 | Mammals and Wetlands; Wetland Ecosystems; Freshwater Wetlands (Marshes, Swamps, Riparian) | Ch. 10,11 | Ch. 9,10,11 |
| | <i>Recorded lecture</i> Online lecture quiz due April 16 at 5 PM Class exercise/written management plan due April 16 at 5 PM | | |
| Week 16 | Finish Freshwater wetlands and review | | |
| | <i>Recorded lecture</i> Online lecture quiz due April 23 at 5 PM | | |
| Week 17 | FINAL EXAM ; On material since Exam 2; April 30 | | |

Wetland Wildlife Ecology
Class Exercise
Spring 2024

Work in groups of two. Choose a wetland or a complex of wetlands, a famous wetland in the world or this country... **(local wetlands excluded and the everglades are excluded)**. Prepare a written **management plan** for that wetland. **Your plan should not exceed 10 pages double spaced.**

- Describe and classify the wetlands and the main species of both plant and animals present. Describe the general ecology of the wetland (i.e., hydrology, geomorphology, disturbances, etc.)
- Provide objectives for the management of this wetland.
- Provide justification for the type of management you have chosen. Include any negative impacts that might occur as results of your management strategy.

Make sure to include any special management that is already being utilized or suggested to increase or decrease numbers of species of special interest. **Remember maintaining or restoration of ecosystem function may also be one of the management objectives. Also include why you want to increase, decrease or maintain the population size of these species for your area of this plan.**

- You **MUST have at least two references.**
- **You MUST** use at least one article from a refereed Journal such as the Journal of Wildlife Management, Ecology etc. as a reference **or** Gray literature such as a Master thesis, Dissertation or report made to various organizations. Journals are available online or in the Milton library and the library at the University of West Florida.
- See the Teaching Assistant about performing an online search of databases and interlibrary loan.
- **Provide a literature cited section** with all references correctly formatted. Use the format of a published article's literature cited section from a wildlife or ecology journal as a template for your literature cited.
- **MAKE YOUR LIBRARY LOANS EARLY OR DON' T EXPECT TO RECEIVE YOUR LITERATURE IN TIME**
- Your choice should be cleared with me by **February 1, 2024** (the sooner the better). You must have a preliminary literature cited before **March 1, 2024.**
- **You will give a 10-15 minute presentation (one per group. Consider using PowerPoint, provide handouts) about your report to the class the week after spring break (March 19).**
- Written reports will be due **April 16, 2024.**