Field Ecology of Aquatic Organisms
FAS 4932/5276C

Important Information

This course includes face-to-face sessions. During all face-to-face activities, the following public health and safety protocols are welcome of all students, instructors, and teaching assistants:
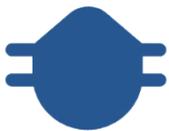
Face Masks are welcome.

Wash hands (>20 sec) before and during class.
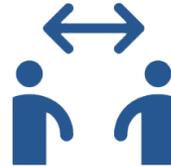
Maintain responsible physical distancing at six feet.

If you feel sick or have symptoms, stay home.

Stay informed of current Covid-19 policies. If you are experiencing COVID-19 symptoms please use the UF Health screening system and follow the instructions on whether you should attend class. Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work.

1   Course Overview

Course Description: This field-oriented course is intended to introduce students to the diverse aquatic habitats found in Florida, their associated flora and fauna, and serve as an introduction to the management issues facing state and federal conservation agencies. Students will gain an understanding of plant and animal community structure across a range of ponds, lakes, rivers, and nearshore coastal systems. Extensive field trips are required and comprise approximately 75% of the total class time. Enrollment includes advanced undergraduates and beginning graduate students.

Course Goals: Students will gain an appreciation for the diverse aquatic ecosystems in Florida, their complex ecology, and the role of management in conserving, regulating, or restoring these ecosystems. Regularly scheduled field trips will allow students to explore and sample freshwater ponds, lakes, streams, springs, estuaries, and nearshore coastal ecosystems. Important themes throughout the course will revolve around: ecology of aquatic ecosystems,

the roles of different habitat types in structuring aquatic communities, water use implications for aquatic ecosystem structure and function, and resource management. In each field trip, we will identify prominent plants, fishes, and invertebrates that occur in the ecosystem, discuss system ecology, and the management role of applicable state and federal agencies. Students will also be introduced to some of the basic sampling methods used to study these systems.

Course Introduction: Welcome to the 2022 offering of Field Ecology of Aquatic Organisms! We are looking forward to working with each of you this semester. We expect students will not have the same backgrounds, identities, or levels of experience with the ecosystems and techniques we will be learning about, and that's okay. As with any field or lab work, open communication is key, so we highly encourage students to feel comfortable vocalizing any questions, comments, or concerns they have as they move through the course. Please feel free to let us know your name and gender pronoun preference. We welcome you to contact us outside of class through Canvas or the email addresses or phone numbers listed above, and we will be sure to respond to you in a timely manner. The main focus of the course is learning from experts about many of the amazing aquatic ecosystems that can be found in north Florida. In addition to the primary learning topics, this course will provide examples of potential career options for students who are interested in studying or working in natural resources. Students are encouraged to ask questions of the instructors, teaching assistant (TA), and our guest speakers related to these potential career paths.

- 3 Credits
- Semester A Semester 2022
- Face-to-face, with canvas materials
- Monday, Wednesday, Friday - 8:00 a.m. – 5:00 p.m. (see **NOTE** under Course Schedule below)
- Fisheries & Aquatic Sciences Conference Room, Millhopper Campus or http://elearning.ufl.edu/

Course Prerequisites: none

Instructors:
- **Charlie Martin** (he/him)
  - Email: charles.martin@ufl.edu
  - Telephone: (352) 325-6081, (256) 504-1432
  - Office: Nature Coast Biological Station; Cedar Key, FL
  - Office hours: Tuesdays 1-3pm, virtual (zoom) on request
- **Donald Behringer** (he/him)
  - Email: behringer@ufl.edu
  - Telephone: (352) 273-3634

- o Office: Fisheries & Aquatic Sciences main building, room 24.
- o Office hours: By appointment
- **Lindsey Reisinger**
  - o Email: lreisinger1@ufl.edu
  - o Telephone: (352) 294-1355
  - o Office: Fisheries & Aquatic Sciences DeQuine Bldg
  - o Office hours: By appointment

Teaching Assistant: Zoey Hendrickson zoey1996@ufl.edu, (352) 219-7104

Textbook and/or readings: None are required, although several field guides are suggested as appropriate supplemental course material. Additional reading materials will be provided by course instructors.

2   Learning Outcomes

Upon completion of this course, students will:
- Be able to identify key flora and fauna found in Florida's ponds, lakes, streams, rivers, estuaries, and nearshore coastal waters and have a basic understanding of their ecologies
- Be familiar with regularly used sampling gear and methods to collect flora and fauna across a broad range of habitat types
- Demonstrate an understanding of important ecological relationships in Florida's diverse aquatic ecosystems
- Demonstrate an understanding of the potential consequences of human activities and natural disturbance events on the structure and function of aquatic ecosystems in Florida
- Understand the priorities and role that state and federal environmental and resource management agencies have in conserving, regulating, or restoring the aquatic systems and organisms in Florida.

3   Course Logistics

Students may access lectures, assignments, readings, and supporting materials through the course Canvas site as they become available.

Technology Requirements:
- A computer or mobile device with high-speed internet connection.
- A webcam, headset and/or microphone, and speakers.

- Latest version of web browser. Canvas supports only the two most recent versions of any given browser. [What browser am I using?](#)
- Installation of proctoring software may be required and will be provided if so.

Classes start at 8:00 am to approximately 5:00pm and meet at Fisheries and Aquatic Sciences Conference Room (located on the Millhopper campus). **NOTE**: there is no class on May 30 (Memorial Day) but an overnight trip to Cedar Key May 26-27 (Thu-Fri). The return time varies based on location of the field trip. The schedule below represents the tentative schedule for the course, but plans may be altered depending on weather or logistical constraints and one overnight trip is planned. Any changes will be clearly communicated through Canvas as soon as possible.

3.1 Description of Assessments & Activities

FIELD TRIPS

The majority of the course involves day trips in the field as well as one 2-day field trip with an overnight stay on Seahorse Key (hence participation is imperative!). At the beginning of each day, we will meet at the Fisheries and Aquatic Sciences Millhopper campus parking lot, have a short briefing on the field trip, and depart in UF vans/trucks. Information and reading material for that particular day/trip will be posted in advance on the Canvas site. Students should come prepared with adequate sun protection in the form of hats, covering clothing, and/or sunscreen. Bug spray is HIGHLY encouraged for the overnight stay on Seahorse Key (see handout on the Seahorse Key module for a full list). Clothing should be able to get wet and dirty (including towels and a change of clothing). Any valuables (e.g., phone, wallet) should have adequate protection from water (e.g., dry box, Ziploc bags). Students should come prepared with enough food and water for the day. Additional details and requirements for each trip will be posted on Canvas prior to the trip.

3.2 Grades & Grading Scale

Grading will be evaluated based on class participation and professionalism (50 points), 3 exams (100 points each; freshwater flora and fauna field identification midterm, flora and fauna estuarine/marine field identification final, written final), mini video project on the ecology of a fish or other aquatic species (100 points; 3-5 min duration – instructions will be supplied). Given the importance of field trips to the class participation is based on attendance. If you need to miss any classes, please let the instructors or TA know as soon as possible.

Grading Scale (%)
A 90-100
B+ 85-89.99
B 80-84.99
C+ 75-79.99
C 70-74.99
D+ 65-69.99
D 60-64.99

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

4　Learning Content

Date	Activity	Instructor(s)
Week 1:		
May 23 – Mon	Organization and Introduction to Class	All
	Orange Lake with FWC (Travis Tuten, Patrick McCord)	Behringer
May 25 – Wed	GTM NERR, Northeast FL	Behringer
May 26/27 – Thurs/Fri	Seahorse Key overnight trip (overnight field trip) Fee: $15-25	Martin/Behringer
Week 2		
May 30 – Mon	NO CLASS – Memorial Day	
June 1 – Wed	Cedar Key, FWC fisheries independent monitoring (FWC FWRI staff)	Martin
June 3 – Fri	Lower Suwannee River with USFWS (Vic Doig)	Martin/Reisinger
	Estuarine/Marine Flora & Fauna ID Exam (FAS Conference Room)	
Week 3:		
June 6 – Mon	Springs - Santa Fe River or other springs depending on conditions with SRWMD (Sean King)	Martin/Reisinger
June 8 – Wed	Streams and Imperiled Species (Gary Warren)	Reisinger
June 10 – Fri	Make-up Field Day **OR**	
	Freshwater Flora & Fauna ID Exam (FAS Conference Room)	
Week 4:		
June 13 – Mon	**Final Exam** (FAS Conference Room)	
	Video Project Due	

5　Policies and Requirements

This course plan and syllabus are subject to change in response to student and instructor needs. Any changes will be clearly communicated in advance through Canvas.

5.1　Late Submissions & Make-up Requests

It is the responsibility of the student to access on-line lectures, readings, quizzes, and exams and to maintain satisfactory progress in the course. 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/ugrad/current/regulations/info/attendance.aspx

Computer or other hardware failures, except failure of the UF e-Learning system, will not excuse students for missing assignments. Any late submissions due to technical issues MUST be accompanied by the ticket number received from the Helpdesk when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request consideration.

For computer, software compatibility, or access problems call the HELP DESK phone number—352-392-HELP = 352- 392-4357 (option 2).

5.2 Communication Courtesy and Professionalism

Just as in any professional environment, meaningful and constructive dialogue is expected in this class and requires a degree of mutual respect, willingness to listen, and tolerance of opposing points of view. **Respect for individual differences and alternative viewpoints will be maintained in this class at all times.** All members of the class are expected to follow rules of common courtesy, decency, and civility in all interactions. Failure to do so will not be tolerated and may result in loss of participation points and/or referral to the Dean of Students' Office.

5.3 Semester Evaluation Process

Student assessment of instruction is an important part of efforts to improve teaching and learning.
At approximately the mid-point of the semester, the School of Forest, Fisheries, & Geomatics Sciences will request anonymous feedback on student satisfaction on various aspects of this course. These surveys will be sent out through Canvas and are not required but encouraged. This is not the UF Faculty Evaluation!
At the end of the semester, 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/.

5.4 Academic Honesty Policy

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 them 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 or 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.

5.5 Inclusive Learning Environment

We strive to develop and maintain a classroom that values and includes people with diverse backgrounds, beliefs, and life experiences, promote equitable opportunities through the work we conduct, and make continuous efforts to review, self-critique, adapt, and improve. 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.

This course is taught in the historic territories of the Timucua, Seminole, and crossroads of the Native American peoples who long inhabited this land. We honor and acknowledge the land and waters themselves as well as the people who have stewarded it for generations. We are called to continue to learn about the history of the systems we study as well as consider their future.

5.6 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, http://www.disability.ufl.edu

5.7 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.

6 Campus Helping Resources

For issues with technical difficulties for e-learning in Canvas, please post your question to the Technical Help Discussion in your course, or contact the UF Help Desk at:

- Learning-support@ufl.edu | (352) 392-HELP - select option 2 | http://elearning.ufl.edu
- Library Help Desk support http://cms.uflib.ufl.edu/ask
- SFFGS Academic Hub https://ufl.instructure.com/courses/303721

6.1 Student Life, Wellness, and Counseling Help

Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- Counseling and Wellness resources http://www.counseling.ufl.edu/cwc/
- U Matter, We Care http://www.umatter.ufl.edu/
- Career Connections Center http://career.ufl.edu/
- Other resources are available at http://www.distance.ufl.edu/getting-help for online students.

6.2 Student Complaint Process

The School of Forest, Fisheries, & Geomatics Sciences cares about your experience and we will make every effort to address course concerns. We request that our online students complete a course satisfaction survey each semester, which is a time for you to voice your thoughts on how your course is being delivered. You can also submit feedback anytime.

If you have a more urgent concern, your first point of contact should be the Academic Coordinator or the Graduate/Undergraduate Coordinator for the program offering the course. You may also submit a complaint directly to UF administration:

- https://distance.ufl.edu/getting-help/
- https://registrar.ufl.edu/complaint.html

6.3 Inclusive Learning Environment and Land Acknowledgement