

IDH 3931: Okefenokee Orchestra: Plant Communication Through Electromagnetic Detection

Honors Uncommon Classroom Course

General Information

Critical Class Dates

- Pre-Trip Meeting, January 20th 6:30-8:30, CORE Building, 1441 Bledsoe Dr.
- January 23-25 to Okefenokee National Wildlife Refuge
- Additional Plant Orchestra Performance During Honors Week (time and campus location TBD)

Instructor

- Michael Amish – (please use email or CANVAS message to communicate with me)
- Office hours: By appointment
- Phone: (352) 328-7721
- Email: mamish@ufl.edu

This syllabus is subject to change by the instructor if needed.

Course Description

We will explore the cypress and Spanish moss of the Okefenokee, taking three days and two nights to paddle through the headwaters of the Suwannee River, and to discover the fascinating world of plant communication through the lens of electromagnetic detection. Prepare to engage in hands-on learning in the field with electromagnetic detection devices, designed to capture and interpret the subtle signals emitted by plants. The course will delve into discoveries and the science behind plant consciousness and communication, examining how plants interact with their environment and each other through various detectable and undetectable ways.

Florida elements and activities associated with this course (days canoeing on the water, nights in tents on chickee tent platforms) will be physically demanding, but it will be worth it for the adventure. By the end of this trip-based course, you will have gained a deeper appreciation for where science, art, and our connection to nature coexist.

This course culminates in a community “plant sound bath” concert where the plants themselves will become performers along with your creative audio interpretation of their original field signal recordings. This performance will invite students and participants to not only hear the harmonious interplay between technology and nature that was recorded in the field, but also interact with it and view it through cymatic visual interpretations of the manipulated plant signals.

This experiential course aims to reposition how we as humans, view ourselves in the order of the animal kingdom, what we consider as higher or lower life forms in light of communication and consciousness shared by humans, animals and plants alike.

Required Readings and Works

- None
- Additional readings will be distributed during our trip or added on the course site in Canvas.

Graded Work

Description of Graded Work

Students are simply expected to participate in the following activities during this course:

- Participation in the canoeing & camping expedition to the Okefenokee
- Electromagnetic sampling and recording of plants while on the expedition
- Rendering electromagnetic samplings into audio
- Participation in a class plant concert during Honors week

Each portion will be counted as 25% of your grade.

A minimum grade of B is required to earn Academic points towards Honors Completion Requirements. Once you have earned your final grade in this course, please upload the course information and final grade from your Unofficial Transcript into your Honors Canvas Cohort: Honors Requirements module to earn Honors Milestone / Completion credit

Grading Scale

For information on how UF assigns grade points, visit:

<https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

A	94 – 100%		C	74 – 76%
A-	90 – 93%		C-	70 – 73%
B+	87 – 89%		D+	67 – 69%
B	84 – 86%		D	64 – 66%
B-	80 – 83%		D-	60 – 63%
C+	77 – 79%		E	<60

Grading Rubric(s)

List of Graded Work

Assignment	Description	Type	Points
Expedition to Okefenokee	Attended and participated in discussions	Individual	25
Electromagnetic Plant Signal Sampling	Identified a plant, sampled it through our sampling devices and recorded it and saved it on the ipad	Individual	25
Rendered Samples Into Audio	Used the app on the ipad or another device to turn the sampled signals into audio and submitted it through Canvas	Individual	25
Participated in Plant Concert	Attended and participated in class plant concert during Honors Week (time and location TBD)	Individual	25
***Total points			100

Student Learning Outcomes (SLOs)

Content: *Students demonstrate competence in the terminology, concepts, theories and methodologies used within the expedition and will be able to identify, describe, and explain:*

- the importance of plants to our planet.
- the similarities of human senses and plant senses.

Critical Thinking: *Students carefully and logically analyze information from multiple perspectives and develop reasoned solutions to problems within the discipline(s).*

- Students will be able to analyze and evaluate:
 - How plant signaling can be detected using supplied detection devices
 - Discussions on plant communication and consciousness

Technical: *Students demonstrate technical skill in setting up detection devices, recording signals and translating said signals into audio*

- Students will be able to construct, interpret and present:
 - The detection devices connected to identifiable plants within the swamp
 - The audio translation from raw plant electromagnetic signals

Connection: *Students connect course content with meaningful critical reflection on their intellectual, personal, and professional development at UF and beyond.*

- Students will be able to connect course content with their own personal beliefs and behaviors regarding ideas of plant communication, cognition and how humans view plants and their role on the planet.

Honors Specific Information

Honors Program contact information:

- Honors Program, Honors Village Complex #4, 352-392-1519
- Quick questions for an Honors advisor? Email advisor@honors.ufl.edu

- Need an Honors advising appointment? Schedule via Microsoft Bookings: <https://bit.ly/UFHonorsAdvising>
- Honors Program Event Calendar: <https://www.honors.ufl.edu/news--events/calendar-of-events/>

Required Policies

A link to all UF academic policies and resources can be found here:

<https://go.ufl.edu/syllabuspolicies>

Attendance Policy

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

Students Requiring Accommodation

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting <https://disability.ufl.edu/students/get-started/>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

UF Evaluations Process

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online. Students can complete evaluations in three ways:

- The email they receive from GatorEvals,
- Their Canvas course menu under GatorEvals, or
- The central portal at <https://my-ufl.bluera.com>

Guidance on how to provide

constructive feedback is available

at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens.

Summaries of course evaluation results are available to students at

<https://gatorevals.aa.ufl.edu/public-results/>.

University Honesty Policy

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and

integrity by abiding by the Honor Code. On all work submitted for credit by students 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.” The Honor Code (<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Counseling and Wellness Center

Contact information for the Counseling and Wellness Center: <http://www.counseling.ufl.edu/>, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

The Writing Studio

The writing studio is committed to helping University of Florida students meet their academic and professional goals by becoming better writers. Visit the writing studio online at <http://writing.ufl.edu/writing-studio/> or in 2215 Turlington Hall for one-on-one consultations and workshops.

Use of AI for Written Assignments Only

It is crucial for you to ensure you understand the material and can independently apply critical thinking and analysis to the assignment. Language models/Chatbots, such as ChatGPT, can aid in exploring perspectives and refining arguments. If you decide to use language models for your written assignments be sure to verify the information provided, as the assignment will be evaluated based on your critical analysis and incorporation of the response generated by AI into your essay.

In-Class Recordings

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.