

**Instructional and Communication Technologies
in Agriculture and Natural Resources**

AEC 5541

Fall 2023 – 3 Credit Hours

Department of Agricultural Leadership, Education, & Communication

Instructor

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Office Hours: by appointment

Learning Assistant

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Office Hours: by appointment

Class Times

Thursday: Periods 6-8 (12:50 PM – 3:50 PM)

Location

Bryant 107

* It is important you attend as many class meetings as possible, unless you have an excused absence.

Course Description

Planning and producing written and visual instructional and communication materials for programs in the agricultural and life sciences.

Course emphasis:

AEC 5541 will focus on writing, live web-streamed video production, instructional and communication technologies, solutions-focused science communication, and the development and implementation of a real-world electronic field trip.

You will learn skills and knowledge in the following areas:

- Working with scientists, Extension specialists, and STEM subject matter experts
- Theory and practices for PK-12 STEM engagement programming
- Instructional design for non-formal and informal engagement programming
- Development of online Research Sparks for science communication
- Mobile video production, editing, and streaming
- Project management, implementation, and evaluation

Course Objectives

After this course, you will be able to:

1. Create content with STEM subject matter experts to develop science engagement content
2. Analyze and identify relevant STEM education standards for PK-12 learning
3. Develop, implement, and assess a mobile electronic field trip
4. Communicate STEM research via an interactive online Research Spark format

You will practice and demonstrate theories and skills through in-class and online discussions, literature review and analysis, and development and implementation of an electronic field trip.

Course Design

This course is structured following a project-based learning (PjBL) design. Our driving question this semester will be:

How can we as science communicators and leaders research and apply information and communication technology to science engagement and learning about the UF/IFAS Gulf Coast Research and Education Center (GCREC), related research, and careers?

PjBL steps include:

(Buck Institute for Education: <http://www.bie.org>)

- Challenging problem/question
- Sustained inquiry
- Authenticity
- Student voice & choice
- Reflection
- Critique & vision
- Public Product

This class is also designed to follow the 'Partnering Pedagogy' philosophy. We are partners in your learning and will work together to develop pathways and solutions to reach course learning goals.



Course Readings and Resources

Textbook:

There are **no required texts** for this course. Readings will be posted in Canvas.

Online:

Canvas, Adobe Creative Suite (Premier Pro & Photoshop), Canva

Assignments

Instructional Goal	Assignment/Activity	Possible Points
1,2,3	Research Spark	
	• Abstract draft	50
	• Spark draft	50
	• Final Abstract & Spark	100
3	Technology Tool Review and Presentation	100
3	Practice Production	100
	Electronic Field Trip	
1,2,3	• Development	100
1,2,3	• Implementation	100
1,2,3	• Assessment	100
1,2,3	Final Presentation	100
1,2,3	Online Activities (x 4)	160
	Professionalism	40
	TOTAL	1000

Research Spark

You will develop a Research Spark about a topic related to our course content and/or electronic field trips. Further instructions will be provided during class and in Canvas.

Technology Tool Review and Presentation

You will identify, research, and apply an instructional/learning/communication technology that could be used to engage audiences/learners in non-formal settings, use the tool, and demonstrate it in class.

Practice Production

You will create practice videos and test a live video stream, similar to our final electronic field trip.

Electronic Field Trip (EFT)

We will work as a class to develop, implement, and assess a pilot electronic field trip.

- **Development**
 - Capturing and editing b-roll ahead of time
 - Scripting
 - Working with scientists
 - Recruiting schools
 - Developing a Teacher's Guide
 - Preparing materials for Google Classroom/other platforms

- **Implementation**
Live streaming two to three EFTs in various formats
Field observations
Questions from schools
- **Assessment**
Develop, implement, and rough analysis of pre- post-research of EFT participants

Final Presentation

You will give a final presentation about your literature review, fieldwork observation assignment, and role/learning in the EFT.

Online Activities

You will complete up to 8 online activities throughout the semester. These will include assignments such as discussion boards, written reflections, and skills demonstrations such as video shooting and editing.

Course Grading

The course grading scale is provided in the following section. Papers and out-of-class assignments must be typed and formatted according to instructions provided by me. You will receive specific information well in advance of deadline dates.

Grading scale

A = 93-100%	C+ = 76 – 79.99%	F = Below 60%
A- = 90 – 92.99%	C = 73 – 75.99%	
B+ = 86 – 89.99%	C- = 70 – 72.99%	
B = 83 – 85.99%	D+ = 66 – 69.99%	
B- = 80 – 82.99%	D = 63 – 65.99%	
	D- = 60 – 62.99%	

Further information about UF grading policies can be found here:

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

General Course Expectations

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/>

Attendance

If you must miss class, please keep up with the assigned readings, recordings of class meetings, and online activities, so you can make meaningful contributions. We understand in current times that life has disruptions that sometimes we cannot avoid. You can miss **THREE** class meetings – as excused. In the event you cannot attend class, communicate directly with both Dr. Loizzo **AND** Gabe via email.

Late Assignments

The ability to meet deadlines is one of the most basic requirements expected of professionals. Announced deadlines are firm for all graded work. If you are unable to meet a deadline, please let us know ahead of time, and we will work with you to achieve a reasonable resolution.

Zoom Class Recording Privacy Policy

Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

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.

Online Course Evaluation Process

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

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 Conduct Code specifies a number of behaviors that are in violation of this code and the possible sanctions. [Click here to read the Conduct Code](#). If you have any questions or concerns, please consult with the instructor or TAs in this class.

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.

Services for Students with Disabilities

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. [Click here to get started with the Disability Resource Center](#). 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.

Health and Wellness Resources

Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university’s counseling resources.

- U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit [U Matter, We Care website](#) to refer or report a concern and a team member will reach out to the student in distress.
- Counseling and Wellness Center: [Visit the Counseling and Wellness Center website](#) or call 352-392-1575 for information on crisis services as well as non-crisis services.
- Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or [visit the Student Health Care Center website](#).
- University Police Department: [Visit UF Police Department website](#) or call 352-392-1111 (or 9-1-1 for emergencies).

- UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; [Visit the UF Health Emergency Room and Trauma Center website](#).

Academic Resources

- E-learning technical support: [Contact the UF Computing Help Desk](#) at 352-392-4357 or via e-mail at helpdesk@ufl.edu.
- [Career Connections Center](#): Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.
- [Library Support](#): Various ways to receive assistance with respect to using the libraries or finding resources.
- [Teaching Center](#): Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.
- [Writing Studio](#): 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.
- Student Complaints On-Campus: [Visit the Student Honor Code and Student Conduct Code webpage for more information](#).
- On-Line Students Complaints: [View the Distance Learning Student Complaint Process](#).

AEC 5541
Instructional and Communication Technologies in Agriculture and Natural Resources
Fall 2023 Tentative* Course Schedule

Week	Topic/Class Happenings	Assignments
Background & Planning Phase		
1 Aug 23	<ul style="list-style-type: none"> • Welcome, introductions, & syllabus • EFT background 	Intro Video
2 Aug 28	<ul style="list-style-type: none"> • ID, ID models, ICTs • USDA grant context • Tech Tools & Research Sparks 	
3 Sep 4 (9/4 holiday)	<ul style="list-style-type: none"> • Science communication & engagement • Guest speaker 	Online Activity (OA) 1
4 Sep 11	<ul style="list-style-type: none"> • Scientists as Storytellers • Science standards • EFT planning & Research Sparks 	
5 Sep 18	<ul style="list-style-type: none"> • Non/informal science education • Mobile video production • EFT planning & Research Sparks 	OA 2
Promotion & Pre-Production		
6 Sep 25	<ul style="list-style-type: none"> • Visit GCREC (Sep 28) • EFT development 	
7 Oct 2 (Loizzo @Guelph) (10/6 Homecoming)	<ul style="list-style-type: none"> • Interactivity & assessment • EFT development • Tech Tools drafting 	Teachers' Guide Script Drafts Practice Production
8 Oct 9	Tech Tool presentations	
9 Oct 16 (Loizzo @ AECT)	<ul style="list-style-type: none"> • EFT hardware & software practice • EFT development 	Script Drafts Practice Production
Implementation & Evaluation		
10 Oct 23	EFT Go Live #1 (Oct 26)	
11 Oct 30	<ul style="list-style-type: none"> • Research Sparks drafting 	OA 3
12 Nov 6 (11/10 holiday)	No Class Research Spark Draft	
13 Nov 13	EFT Go Live #2 (Nov 16)	
Review & Reflect		
14 Nov 20 (11/22 - 25 holiday)	No Class EFT Assessment / Reflection	

Week	Topic/Class Happenings	Assignments
15 Nov 27	EFT Review & Assessment	Research Sparks
16 Dec 4 (12/7 & 8 reading days)	No Class	OA 4
FINALS Dec 11	Final Presentations December 13 @ 8 – 10 PM	

*This schedule is tentative and subject to change – contingent upon learning progress, project milestone adjustments, instructor discretion, and other unforeseen circumstances.