



### **AEC 5544:**

# Curriculum Development and Assessment Techniques in Emerging Agricultural Technologies

Fall 2023

### **AEC Agricultural Education Program (TCH) Mission**

The Agricultural Education Program at the University of Florida prepares students to be effective leaders of a school-based agriscience program within the community. Graduates demonstrate the requisite knowledge and skills in teaching and learning and in the agricultural sciences to contribute to the development of others. Graduates possess the desire for continuous personal and professional growth.

#### **Values**

The Agricultural Education Program values...

- Excellence in teaching.
- The complete school-based agriscience program classroom and laboratory instruction, leadership development, and extended learning.
- Instruction both in and about agriculture.
- Teachers being essential to the success of the local school.
- Teacher involvement in the school, local, and professional communities.
- Passion for agriculture and compassion for learners.
- Professionalism in the attitude and actions of all involved in agricultural education.
- The contributions that agricultural educators can make outside of formal education.
- Agriculture's contribution in addressing societal issues on a local to global scale.

### **Learning Principles**

- 1. Learning is both social and individual.
- 2. Learning best occurs when moving from the concrete to the abstract.
- 3. Learning and performance are enhanced by continuous, explicit reflection and feedback.
- 4. Learning is affected by learner motivation, attitude and values.
- 5. Learning occurs at all levels of cognition.
- 6. Learning is purposeful, contextual, and non-linear.
- Learning is organized around transferable core concepts that guide thinking and integrate new knowledge.
- 8. Learning is enhanced by addressing a student's preferred learning style, prior knowledge, and experiences.
- 9. Learning occurs best in a supportive, challenging, and structured environment.
- 10. Learners reveal and demonstrate their understanding when they can apply, transfer, and adapt their learning to new and novel situations and problems.

#### **Transfer Goals**

- 1. Design an instructional program.
- 2. Create an environment conducive to learning.
- 3. Deliver effective instruction.
- 4. Assess student learning.
- 5. Participate in continuous professional development.

### **Course Instructors**

R. G. (Tre) Easterly III, PhD Assistant Professor 307C Rolfs Hall 352-273-4052 tre.easterly@ufl.edu

Office Hours- Wed.1:30-3:00 or by Appt.

# Teaching Assistant Jason Dossett

Graduate Assistant Agricultural Education jdossett@ufl.edu

Rolfs 306

Office Hours: By appot

### **Time and Location**

Online Modules: Via Canvas. Must be completed by Monday evenings at

11:59 p.m.

Discussion and Lab: Tuesday periods 2&3; Rolfs Hall 306

#### **Course Description**

This course is designed to expose students to appropriate teaching techniques, curricula and resources. Emphasis will be placed on new and emerging areas in food, agriculture and the natural resource sciences.

### **Course Essential Questions & Objectives**

- 1- How do effective teachers decide what to teach every day?
  - Develop a plan for a total agricultural education program.
  - Establish a sequence of classes that meet the program goals.
  - Articulate the purpose of an SBAE program with other professionals and stakeholders.
  - Develop a logical sequence of units for an SBAE course.
  - Find, unpack, and embed FDOE standards and benchmarks.
  - Develop a syllabus for an SBAE course.
  - Determine an appropriate unit structure for a course.
  - Write meaningful transfer goals, understandings, and essential questions.
  - Determine appropriate knowledge and skills for a unit of instruction.
  - Write transfer goals, understandings, and essential questions
  - Craft meaningful learning objectives at various levels of blooms taxonomy.
  - Develop daily lesson plans to guide instruction.
- 2- How can I tell if my students are meeting my learning goals?

- Create meaningful rubrics to assess authentic learning experiences.
- Write an assessment that meets unit goals
- Implement formative assessment strategies in instruction.
- Complete the NQPS document to evaluate a program
- 3- How do I make sure all students are getting it?
  - Use data to provide justification for instructional practices
  - Create a plan to differentiate instruction for students in an SBAE class.
- 4- How do I handle disruptions/problem behavior in my classroom?
  - Develop a plan to manage student behavior in an SBAE course.
  - Demonstrate implementing an escalation plan to deal with student misbehavior.

### **Required Texts**

Resources available on course eLearning site on Canvas

#### Reference Texts (optional)

Phipps, L. J., Osborne, E. W., Dyer, J. E., & Ball, A. L. (2008). *Handbook on Agricultural Education in Public Schools*. Clifton Park, NY: Thomson Delmar Learning (ISBN 978-1-4180-3993-6)

### **DESCRIPTION OF ASSIGNMENTS/CORNERSTONE TASKS**

(Note tasks which contribute to assessment of FEAPS)

Assignment	Transfer Goal	Objective	Points
Curriculum Map Part 1 (Total Program Plan)	1	3.1	100
Curriculum Map part 2 (Course Plan)	1, 2	3.2-3.4	150
Curriculum Map part 3 (Unit Plan Draft)	1, 4	2.1-2.2, 4.1-4.4, 5.1	30
Curriculum Map part 3 (Unit Plan)	1, 4	2.1-2.2, 4.1-4.4, 5.1	250
Weekly Assignments (23 points each)	6	All	345
Resource Share	3, 5, 6	All	25
Observation Hours	All	All	100
Research to Practice*	All	All	100

<sup>\*</sup>Grad only assignment

#### **Weekly Assignments**

Each weekly assignment is worth 23 points. The weekly assignment consist of completing pre-class work, attending class, and submitting an assignment. The pre-class work must be completed before each class begins. The assignment will vary each week. The assignments will be available in the canvas module for the course week. To earn the full points for the in-class work, you must come to class on time and prepared to work and fully participate in the class discussions/daily assignments/or other tasks that will take place in the class. Your weekly worksheet with all assignments should be turned in by 11:59 PM Sunday on the week following class.

### **Resource Share**

The resource share assignment is designed to familiarize the class with various resources available to support teaching in the agriscience classroom. You must find and analyze a resource that is available to everyone in the course (ie. Cannot be a paid resource or require a membership). You will be allowed 10 minutes of class time to share the resource with the class and to explain the merits of the resource.

### <u>Curriculum Map Part 1 (Total Program Plan)</u>

The program plan assignment is a written document that provides a clear justification and goals of the program to administers, stakeholders, and students. The program plan should include a philosophical overview of the program, a logical sequence of courses, appropriate industry certifications, FFA activities, and SAE opportunities available for students in the program.

### <u>Curriculum Map Part 2 (Course Plan)</u>

The course plan assignment will include a course syllabus and break down of the units to be taught in the course. The course plan should provide a detailed description for the major concepts taught in the course.

## **Curriculum Map Part 3 (Unit Plan)**

The unit plan assignment is a detailed plan for an entire unit of instruction that lasts at least 15 class days. The components of the unit plan are: a daily lesson plan for every day of instruction, all the materials associated with the lessons (ie powerpoints, handouts etc.), written assessments, and formative assessments. A rubric and assignment sheet is provided.

### **Research to Practice**

The research to practice assignment is designed for graduate students. Students should find a scholarly research article related to the course objectives, provide a synthesis of the article, and describe the specific practical implications the recommendations hold for their classroom instruction. To earn full points on the assignment, they should prepare a one-page document to be shared with the class.

### Attendance and Make-up Exams and Assignments

Assignments will not be accepted late, unless other arrangements have been made, prior to the due date, with Dr. Easterly.

Students who are absent from class for any reason will assume complete responsibility for obtaining information missed during their absence. There are no opportunities to make-up work outside of the following: Prior arrangement and approval of the instructor, university/college approved field trips, competitive and leadership development events (with prior instructor approval). In case of emergencies, arrangements for completing make-up exams or assignments should be made immediately upon return to class and proper documentation should be presented during the first meeting with the instructor.

### **Grading Scale %**

A = 1050-1100	B- = 900-929	D+ = 770-799
A = 1000 - 1049	C+ = 870-899	D = 730-769
B+ = 970-999	C = 830-869	D- = 700-729
B = 930-969	C = 800 - 829	E = below 700

### **Grades and Grade Points**

For information on UF policies, see: <a href="https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/">https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/</a>

### **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.

### **Student Privacy**

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see: http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html

### **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 <a href="https://gatorevals.aa.ufl.edu/students/">https://gatorevals.aa.ufl.edu/students/</a>. 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 <a href="https://ufl.bluera.com/ufl/">https://ufl.bluera.com/ufl/</a>. Summaries of course evaluation results are available to students at <a href="https://gatorevals.aa.ufl.edu/public-results/">https://gatorevals.aa.ufl.edu/public-results/</a>.

#### 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.

### In Class Recording Policy

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

#### **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, UF Disability Resource Center.

Canvas Accessibility Standards Zoom Accessibility Information

#### Campus Resources:

- Academic Resources:
- E-learning technical support
  - Contact the <u>UF Computing Help Desk</u> at 352-392-4357 or via e-mail at <u>helpdesk@ufl.edu.</u>
- Career Connections Center
  - Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.
- <u>Library Support</u>
  - 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 <u>Student Honor Code and Student Conduct Code webpage</u> for more information.
- On-Line Students Complaints
  - View the <u>Distance Learning Student Complaint Process</u>.
- Health and Wellness:
- U Matter, We Care
  - If you or someone you know is in distress, please contact <u>umatter@ufl.edu</u>, 352-392-1575, or visit <u>U Matter, We Care</u> <u>website</u> to refer or report a concern and a team member will reach out to the student in distress.
- Counseling and Wellness Center
  - Visit the <u>Counseling and Wellness Center website</u> or call 352-392-1575 for information on crisis services as well as non-crisis services.
  - 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.
- 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 <u>UF Police Department website</u> or call 352-392-1111 (or 9-1-1 for emergencies).
- GatorWell Health Promotion Services
  - For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the <u>GatorWell website</u> or call 352-273-4450.

#### Florida Educator Accomplished Practices (FEAPs)

In this course, one or more assignments have been selected at "Key Tasks" that will assess your mastery of knowledge, skill, and/or dispositions that the State of Florida requires of all entry-level educators. These assignments were specifically selected as Key Tasks because they align with the 6 Florida Educator Accomplished Practices (FEAPs).

Your mastery of each Indicator will be measured by your performance on a Key Task. To pass this course, you must successfully complete all Key Tasks and receive a rating of "Developing," "Accomplished," or "Exceptional." No exceptions will be made to this rule, even if you do not plan to practice in Florida after graduation or do not apply for state certification.

Students who receive an "Unsatisfactory" rating will be offered a chance to redo the Key Task or, in some cases, to complete a comparable task assigned by the instructor. Students who do not complete their makeup work satisfactorily will receive a failing grade at the instructor's discretion.

The rating guide framework below will be used to evaluate your performance on tasks assessing specific FEAP Indicators covered in this course. The language of each FEAP Indicator completes the statements. For more information, please visit the Educator Assessment System Student Portal at: <a href="https://my.education.ufl.edu/">https://my.education.ufl.edu/</a>.

Exceptional	The candidate extensively integrates knowledge to be able to	The
	candidate is prepared to apply this skill in a practical setting.	
Accomplished	The candidate demonstrates knowledge of how to	The candidate is
	prepared to apply this skill in a practical setting.	
Developing	The candidate is acquiring the necessary knowledge to	. The candidate i

	not yet prepared to apply this skill in a practical setting.
Unsatisfactory	The candidate demonstrates little knowledge of how to

#### FEAPs Assessed in this course

- 1e. Uses diagnostic student data to plan lessons.
- 2h. Adapts the learning environment to accommodate the differing needs and diversity of students.
- 3c. Identify gaps in students' subject matter knowledge.
- 3h. Differentiate instruction based on an assessment of student learning needs and recognition of individual differences in students.
- 4a. Analyzes and applies data from multiple assessments & measures to diagnose students' learning needs, informs instruction based on those needs, and drives the learning process.
- 4b. Designs & aligns formative & summative assessments that match learning objectives and lead to mastery.
- 4e. Shares the importance and outcomes of student assessment data with the student and the student's parent / caregiver(s).
- 4f. Applies technology to organize and integrate assessment information.
- 5c. Uses a variety of data independently & in collaboration w/ colleagues, to evaluate learning outcomes adjust planning & continuously improve effectiveness of the lessons.

# **AEC 4202 Discussion and Lab Course Calendar**

Dates	Topics / Learning Experiences	Due	
Unit 1- Total Program Plan			
Aug 23	First Day of Class- Setting the Stage for the Last Day of Class		
Aug 30	Course Sequencing		
Unit 2- Cour	rse Plan		
Sep 6	Standards and Benchmarks		
Sep 13	Grading Systems & Units		
Sep 20	Syllabus	Curriculum Map Part 1 (Total Program Plan)	
Unit 3- Unit	Plan	,	
Sep 27	Backwards Design		
Oct 4	Performance Assessment	Curriculum Map Part 2 (Course Plan)	
Oct 11	Industry Certifications (LINC Conference)		
Oct 18	Formative Assessment		
Oct 25	Written Assessment (Mr. Dossett)		
Nov 1	Learning Experiences (Mr. Dossett)		
Unit 4- Less	on Plan		
Nov 8	Objectives		
Nov 15	Learning Experiences	Curriculum Map Part 3 (Unit Plan Draft)	
Nov 22	Differentiated Instruction (online Thanksgiving Break)		
Nov 29	Preflection & Reflection		
Dec 6	Final Presentations		
Dec 12:00 PM	No class – Turn in final project	Curriculum Map Part 3 (Unit Plan)	