

# AEC 5544: Curriculum Development and Assessment Techniques in Emerging Agricultural Technologies

Spring 2021

## **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.
- 7. 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.
- 6. Act professionally and responsibly.

**Course Instructors Dr. Tre Easterly** Assistant Professor Agricultural Education 352-273-4052 tre.easterly@ufl.edu | Rolfs 307C Office Hours W 2-4 or by appointment

### **Teaching Assistants**

### Natalie Ferand

### **Alyssa Shepherd**

Graduate Assistant Agricultural Education nferand@ufl.edu Rolfs 310 Office Hours: Tuesday, 11am Plant City; PEPC 105 – 12pm or by appointment

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## 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; Little Hall 113

### **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<br>Goal | Objective                | Due Date   | Points |
|-------------------------------------|------------------|--------------------------|------------|--------|
| Total Program Plan                  | 1                | 3.1                      | February 2 | 100    |
| Course Plan                         | 1, 2             | 3.2-3.4                  | March 23   | 150    |
| Unit Plan                           | 1, 4             | 2.1-2.2, 4.1-4.4,<br>5.1 | April 27   | 250    |
| Weekly Assignments (30 points each) | 6                | All                      | Throughout | 450    |
| Resource Share                      | 3, 5, 6          | All                      | throughout | 50     |
| Research to Practice*               | All              | All                      | April 27   | 100    |

\*Additional assignment for graduate students

## Weekly Assignments

Each weekly assignment is worth 30 points using the following break-down:

- 5 Points- Completing Pre-Class work
- 20 Points- Completing in-class work
- 5 Points- Submitting Reflection

The pre-class work must be completed at 11:59 PM on Monday before each class. 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. A weekly reflection should be submitted by Monday at 11:59 PM the week following the 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>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.

## Course Plan

The course plan assignment will include a course syllabus and stage 1 & 2 for the unit plans for each unit taught in the course. The course plan should provide a detailed description for the major concepts taught in the course.

# <u>Unit Plan</u>

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

## Academic Honesty

In 1995 the UF student body enacted an honor code and voluntarily committed itself to the highest standards of honesty and integrity. When students enroll at the university, they commit themselves to the standard drafted and enacted by students.

## The Honor 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.

On all work submitted for credit by students at the university, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

Students should report any condition that facilitates dishonesty to the instructor, department chair, college dean, Student Honor Council, or Student Conduct and Conflict Resolution in the Dean of Students Office.

(Source: Undergraduate Catalog) It is assumed all work will be completed independently unless the assignment is defined as a group project, in writing by the instructor. This policy will be vigorously upheld at all times in this course.

### **COVID 19 Guidelines**

You are required to wear approved face coverings at all times during class and within buildings. Following and enforcing these policies and requirements are all of our responsibility. Failure to do so will lead to a report to the Office of Student Conduct and Conflict Resolution.

This course has been assigned a physical classroom with enough capacity to maintain physical distancing (6 feet between individuals) requirements. Please utilize designated seats and maintain appropriate spacing between students. Please do not move desks or stations.

Sanitizing supplies are available in the classroom if you wish to wipe down your desks prior to sitting down and at the end of the class.

Follow your instructor's guidance on how to enter and exit the classroom. Practice physical distancing to the extent possible when entering and exiting the classroom.

If you are experiencing COVID-19 symptoms (<u>Click here for guidance from the CDC on symptoms</u> <u>of coronavirus</u>), please use the UF Health screening system and follow the instructions on whether you are able to attend class. <u>Click here for UF Health guidance on what to do if you have been</u> <u>exposed to or are experiencing Covid-19 symptoms</u>.

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. <u>Find more information in the university attendance policies</u>.

#### 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.

#### **Campus Helping Resources**

Campus Helping Resources Students experiencing crises or personal problems that interfere with their general wellbeing 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.

### 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 website</u> to refer or report a concern and a team member will reach out to the student in distress.

*Counseling and Wellness Center*. <u>Visit the Counseling and Wellness Center website</u> 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 <u>visit the Student Health Care Center website</u>.

*University Police Department*: <u>Visit UF Police Department website</u> 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; <u>Visit</u> the UF Health Emergency Room and Trauma Center website.

### 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>.

<u>*Career Connections Center*</u>: 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.

*<u>Teaching Center</u>*: 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*: <u>Visit the Student Honor Code and Student</u> <u>Conduct Code webpage for more information</u>.

*On-Line Students Complaints*: <u>View the Distance Learning Student Complaint</u> <u>Process</u>.

### Services for Students with Disabilities

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, dso.ufl.edu/drc ) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

#### **Online Course Evaluation**

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 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 ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at gatorevals.aa.ufl.edu/public-results/ .

#### 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: <u>https://my.education.ufl.edu/</u>.

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

| Dates  | Topics / Learning Experiences                           | Due                |
|--------|---|--------------------|
| Jan 12 | Articulating the Plan for a Total Program Plan          |                    |
| Jan 19 | Course Sequencing                                       |                    |
| Jan 26 | Standards and Benchmarks                                |                    |
| Feb 2  | Developing a Syllabus                                   | Total Program Plan |
| Feb 9  | Classroom Management                                    |                    |
| Feb 16 | Developing Units  |                    |
| Feb 23 | Transfer Goals, Understandings, and Essential Questions |                    |
| Mar 2  | Rubrics   |                    |
| Mar 9  | Written Assessment                                      |                    |
| Mar 16 | Formative Assessment                                    |                    |
| Mar 23 | Learning Objectives                                     | Course Plan        |
| Mar 30 | Daily Lesson Plans                                      |                    |
| Apr 6  | Using Student Data                                      |                    |
| Apr 13 | Differentiated Instruction                              |                    |
| Apr 20 | Evaluating the Total Program                            |                    |
| Apr 27 | No class – Turn in final project                        | Unit Plan          |
|        |   |                    |

AEC 4202 Discussion and Lab Course Calendar