



AEC 4202/5544: Curriculum Development and Assessment Techniques in Emerging Agricultural Technologies

Spring 2018

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 Instructor

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Time and Location

Lecture: Online via Canvas. Must be completed by Monday evenings at 11:59 p.m.
Discussion and Lab: Tuesday periods 2&3; Rolfs Hall 306
Plant City: Tuesdays 12:30-2:30pm; PEPC 102

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. What is the point of school based agricultural education?
Objective 1.1- Explain Roberts & Ball's model for agricultural subject matter.
2. What variables shape curriculum for the total agriculture education program (Classroom/Lab Instruction, FFA & SAE)?
Objective 2.1- Define Curriculum.
Objective 2.2- Create behavioral objectives according to Bloom's Taxonomy.
3. How should content be organized to best effect student learning?
Objective 3.1- Develop an instructional program plan.
Objective 3.2- Create a curriculum map.
Objective 3.3- Create a course syllabus.
Objective 3.4- Develop a unit plan.
Objective 3.5- Write daily instructional plans.
4. How do I know if my students learned the content?
Objective 4.1- Create a written assessment.
Objective 4.2- Create a grading rubric.
Objective 4.3- Choose appropriate formative assessment strategies.
Objective 4.4- Generate appropriate student feedback.
Objective 4.5- Utilize student data to make curriculum decisions.
5. How can I help every student learn?
Objective 5.1- Incorporate differentiated instruction strategies.

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	Due Date	Points
Attendance/Participation	6	All	Throughout	150
School Instructional Program Plan	1	3.1	Jan 30	100
Curriculum Map & Syllabus	1, 3	3.2 - 3.4	Feb 6	150
Unit Plan	4	2.1-2.2, 4.1-4.4, 5.1	Feb 27	200
Daily Lesson Plans (10 total with 2 types of assessments; with DI alternative assessments)	2, 4	4.1, 4.2, 4.3, 5.1	Apr 24	350

Attendance/Participation

You are expected to be present and actively participate in online videos and class discussions/labs. All videos and readings must be completed by Monday evenings at 11:59 p.m. Each student is expected to prepare two to three questions pertaining to the online video lectures to be discussed in lab. Participation includes being an active member of group interaction during lecture and laboratory instructional meetings, reading peers' assignments and providing constructive feedback, and utilizing laboratory time for effective professional collaboration.

School Instructional Program Plan

Develop a School Instructional Program plan for a four-year period that outlines: (a) which career pathways(s) your program will focus on; (b) which classes will be taught; and (c) the plan for FFA and SAE incorporation of classroom instruction/integration. Assume that you are planning for a two or four teacher program (outlined by your lab instructor).

Curriculum Map & Syllabus (FEAP 1e, 2h, 3c, 3h, 4a, 4b, 4e, 4f, 5c)

Develop a curriculum map by breaking the course into logical units, designating the number of days for each unit, and designating the order that the units would be taught. Provide a written summary that explains why you chose to plan things this way. Assume that there are 180 days in the school year and that 15 days will be allocated for miscellaneous school activities (FSA, assemblies, etc.). Thus, you have 165 instructional days to use. A template will be provided.

Create a syllabus for a course from one of the career pathway programs identified in your School Instructional Program Plan that includes (a) course title; (b) your contact information; (c) your program mission statement and guiding principles; (d) course description; (e) FFA and SAE description and expectations; (f) cornerstone tasks; (g) grading and evaluation; and (h) classroom management policies. A template will be provided.

Unit Plan

Select one of the courses you identified in your Curriculum Map. Using the criteria provided in class, you will create a plan for each unit that you identify for the course in your curriculum map that includes: (a) unit title; (b) NGSS; (c) learning objectives; (d) facilities used; (e) resource/supply list; (f) assessment plan; and (g) content to be taught each for each objective. A template will be provided.

Daily Instructional Plan

Create a set of daily instructional plans that you will use to teach the objectives of one complete unit from the course in your curriculum map and syllabus assignment. The unit must be equal to 10 days. The lesson must be appropriate for the student for which your experience is assigned. You must also provide a differentiated instruction checklist for one of your lesson plans. Each daily instructional plan should include one formative assessment strategy.

Unit Test

You will create a written Unit Test for the content in the Unit Plan you submitted. The Unit Test

should be comprehensive enough to effectively assess student learning of the entire unit. Based on the criteria presented in class, you are required to use multiple types of questions that address the understandings and essential questions you created for the unit. The test must be linked to your learning objectives as well as explain how it measures your cornerstone tasks.

Alternative Assessment Tool

You will create an alternative assessment tool (rubric) to assess student learning of a portion of the content included in your Unit Plan. The rubric should follow criteria presented in class.

Attendance and Make-up Exams and Assignments

To receive the maximum number of points for an assignment, it must be completed and submitted by the due date. No work will be accepted late, unless other arrangements have been made, prior to the due date, with Dr. Bunch.

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 = 95-100	B- = 80-82.9	D+ = 67-69.9
A- = 90-94.9	C+ = 77-79.9	D = 63-66.9
B+ = 87-89.9	C = 73-76.9	D- = 60-62.9
B = 83-86.9	C- = 70-72.9	E = below 60

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.

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

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.

University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu/cwc/
 Counseling Services
 Groups and Workshops
 Outreach and Consultation
 Self-Help Library
 Training Programs
 Community Provider Database
 Career Resource Center, First Floor JWRU, 392-1601, www.crc.ufl.edu/

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.

0001 Reid Hall, 352-392-8565, www.dso.ufl.edu/drc/

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

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 is 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 Online Course Calendar

Modules/ Dates	Topics / Learning Experiences	Due	Reading*
1 - Jan 9	Course Introductions, Curriculum Development, & Roles of Professional Educators		
2 - Jan 16	Florida State Standards National AFNR Career Cluster Standards/Industry Certification		Sunshine State Standards (one area) & AFNR Standards (one area)
3 - Jan 23	Program Planning		
4 - Jan 30	Unit Planning & Course Syllabus	Instructional Plan	
5 - Feb 6	Introduction to Lesson Planning	C-Map & Syllabus	
6 - Feb 13	Exploring Resources for Lesson Planning		
7 - Feb 20	Writing Learning Objectives		
8 - Feb 27	Designing an Interest Approach	Unit Plan	
Mar 6	NO CLASS – Spring Break		
9 - Mar 13	Designing Instructional Content		
10 - Mar 20	Instructional Content Organization		
11 - Mar 27	Designing a Lesson Closure		
12 - Apr 3	Assessments (formative)		
13 - Apr 10	Assessments (summative)		
14 - Apr 17	Assessments (alternative)		
15 - Apr 24	Differentiated Instruction	Daily Plans w/Assessments	

*All online lecture videos and readings should be completed before Monday, 11:59 p.m.

AEC 4202 Discussion and Lab Course Calendar

Dates	Topics / Learning Experiences	Due	Reading*
Jan 9	Course Introductions, Syllabus Scavenger Hunt, & Discussion over planning		
Jan 16	Sunshine State Standards Scavenger Hunt, & Standard Discussion		
Jan 23	Program Planning Practicum		
Jan 30	Unit Mapping & Course Syllabus Practicum	Instructional Plan	
Feb 6	Lesson Mapping Practicum	C-Map & Syllabus	
Feb 13	My CAERT and COP Practicum		
Feb 20	Writing Learning Objectives Practicum		
Feb 27	Interest Approach Practicum	Unit Plan	
Mar 6	NO CLASS – Spring Break		
Mar 13	Lesson Planning Practicum		
Mar 20	Lesson Planning Practicum		
Mar 27	Lesson Closure & Lesson Planning Practicums		
Apr 3	Assessments (formative) Practicum		
Apr 10	Assessments (summative) Practicum		
Apr 17	Assessments (alternative) Practicum		
Apr 24	Differentiated Instruction Practicum	Daily Plans w/Assessments	