



AEC 4202:
Curriculum Development and Assessment
Techniques in Emerging Agricultural
Technologies
(Section 06B4)
Fall 2014

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

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Time and Location

Monday: Periods 2 - 3 (8:30 – 10:25 a.m.) – Rolfs 306
Wednesday: Period 2 (8:30 – 9:20 a.m.) – Rolfs 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. 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- Demonstrate the Understanding by Design process.
Objective 2.3- Create essential questions.
Objective 2.4- 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 know 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.
Objective 5.2- Summarize how teachers can communicate effectively with parents.
Objective 5.3- Develop a classroom management plan.

Required Texts

Resources available on course eLearning site on Sakai

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)
- Wiggins, G. & McTighe, J. (2005). *Understanding by Design*. Upper Saddle River, NJ: Pearson Merrill Prentice Hall (ISBN 0-13-195084-3)

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	100
School Instructional Program Plan	1	3.1	10/20	50
Curriculum Map & Syllabus draft	1, 3	3.2 - 3.4	10/29	50
Curriculum Map & Syllabus	1, 3	3.2 - 3.4	11/12	300
Unit Plan Draft	4	2.1-2.5, 4.1-4.4, 5.1-5.2	11/24	50
Unit Plan (includes at least 8 lesson plans and 2 assessment)	4	2.1-2.5, 4.1-4.4, 5.1-5.2	12/15	450

Attendance/Participation

You are expected to be present and actively participate in class discussions. Participation includes reading peers' assignments and providing constructive feedback during peer critiques on assigned work days, as indicated on the calendar.

Assignments/Cornerstone Tasks

1. 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. Assume that you are planning for a two-teacher program.

2. 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 (FCAT, 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.

3. Unit Plan

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) NGOSs; (c) learning objectives; (d) essential questions; (e) facilities used; (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 at least 8 days long. You may use one of the lesson plans in the AEC 4200 Clinical Teaching Experience assignment. The lesson must be appropriate for the student for which your experience is assigned. You must use a variety of the learning activities presented in AEC 4200. 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 guiding principles 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 six or more days after its original due date, unless other arrangements have been made with the instructor.

Students who are absent from class for any reason will assume complete responsibility for obtaining information missed during their absence and for making up missed assignments and activities. College approved field trips and competitive and leadership development events (with prior instructor approval) are considered legitimate absences with documentation. Make-up work should be arranged prior to the expected absence. In case of emergencies, arrangements for completing make-up exams or assignments should be made immediately upon return to class. *All make-up work must be completed within one week of the student's return to class.*

Grading Scale

A = 950-1000	B- = 800-829	D+ = 670-699
A- = 900-949	C+ = 770-799	D = 630-669
B+ = 870-899	C = 730-769	D- = 600-629
B = 830-869	C- = 700-729	E = below 600

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 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 Course Calendar

Dates	Topics / Learning Experiences	Instructor	Due	Reading*
Aug 25 M	Objectives			https://teaching.uncc.edu/sites/teaching.uncc.edu/files/media/files/file/GoalsAndObjectives/BloomWritingObjectives.pdf
Aug 27 W	Florida Sunshine State Standards	Amy McAllister		
Sept 1 M	No Class – Labor Day			
Sept 3 W	National AFNR Career Cluster Standards/Industry Certification			Sunshine State Standards (one area) & AFNR Standards (one area)
Sept 8 M	Daily Instructional Plan			
Sept 10 W	Daily Instructional Plan			
Sept 15 M	Daily Instructional Plan	Easterly		
Sept 17 W	Defining Curriculum; How Ag Ed Fits in the Broader Curricula (STEM, Content Area Reading)			Darling-Hammond & Bransford 169-174
Sept 22 M	Understanding by Design			Introduction: What is UbD
Sept 24 W	Understanding by Design			McTighe & Wiggins Ch 1
Sept 29 M	Understanding by Design			
Oct 1 W	The Total Ag Ed Program			Phipps, Osborne, Dyer & Ball Chapter 6-7 Phipps et al. Ch 23-28 (optional)
Oct 6 M	Syllabus Development			
Oct 8 W	Classroom Management			
Oct 13 M	Classroom Management			
Oct 15 W	Curriculum Map			
Oct 20 M	Problem-Based Unit Planning		School Instructional Program Plan	CDE Rules and Content (one CDE)
Oct 22 W	CDE Unit of Instruction			
Oct 27 M	Assessment Intro			http://www.iub.edu/~best/pdf_docs/better_tests.pdf
Oct 29 W	Differentiated Instruction	(Online Module)	Curriculum Map & Syllabus Draft	Tomlinson 1, 2 & 6
Nov 3 M	Assessments (written/alternative)			Brookhart (Rubrics) 3-22 84-89
Nov 5 W	Curriculum Map and Syllabus workgroup			Workgroup's Draft
Nov 10 M	Formative Assessments			
Nov 12 W	Assessing in Lab Settings		Curriculum Map & Syllabus	
Nov 17 M	Providing Feedback For Students			Brookhart Ch 1., 3, & 4
Nov 19 W	Oral Feedback	Easterly		
Nov 24 M	Written Feedback	Easterly	Unit Plan Draft	
Nov 26 W	No Class – Thanksgiving Break			
Dec 1 M	Utilizing Data	Dr. Beth LeClear		Venables p 21-91
Dec 3 W	Unit Plan Workgroup			Workgroup's Draft
Dec 8 M	Communicating with parents	Panel Discussion		
Dec 10 W	Program Evaluation			
Dec 15	No Class- Exam Week		Unit Plan	

*All readings should be completed prior to class meeting.