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### **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.

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**Instructor**

Debra M. Barry  
Lecturer  
101C PEPC Building  
813-757-2288  
dmbarry@ufl.edu  
Office Hours: By appointment

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**Time and Location**

Tuesdays 1:00-3:30pm  
Off-site visits—times will vary  
102 PEPC and various school/industry sites

**Course Description**

This course is designed to introduce pre-service agricultural education teachers to laboratory integration into the agricultural education curriculum at the middle school and secondary school level. Emphasis will be placed on skill acquisition, developing knowledge of laboratory components in agriscience, laboratory utilization, facilitating student learning in the laboratory setting, appropriate teaching methods and techniques, curriculum applications, and classroom resources. Course content will be presented during the semester-long course & travel to off-campus sites will be required.

**Course Essential Questions & Objectives**

At the completion of the course, the learner will be able to:

Essential Question: What is the role of the laboratory in SBAE?

Objective:

1. Assess the role of laboratory integration in agricultural education.

Essential Question: How do I design, manage, and evaluate agriscience activities?

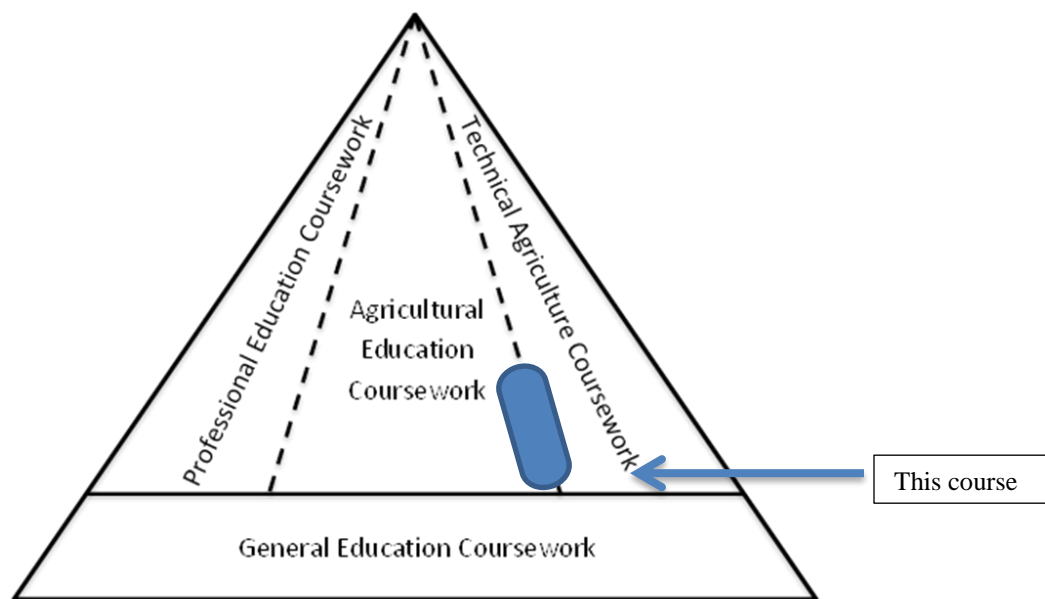
Objectives:

2. Properly design and manage student agriscience projects.
3. Develop a system by which to evaluate agriscience laboratory activities and projects.

Essential Question: What safety concerns should I be aware of during laboratory instruction?

Objective:

4. Develop and implement an agriscience laboratory safety instructional program.



University of Florida – Model for Teacher Education in Agricultural Education

## **Transportation**

Students are expected to provide their own transportation to and from laboratory/industry sites. If special circumstances exist please contact the instructor.

## **Required Texts**

Any required readings will be handed out per class session.

## **DESCRIPTION OF COURSE ASSIGNMENTS**

### **Discussion Posting**

**First discussion:** On the discussion board, post your beliefs about why and how agriculture teachers utilize laboratory settings. In addition, post how you plan to use laboratory settings and what key aspects of laboratory settings you have questions/concerns regarding their use. This should be completed by **January 15th**. Your posting should be thorough, including examples, personal experiences, and justification for your beliefs.

**Final discussion:** After your experiences in this class, your beliefs about how and why teachers utilize laboratory settings may have changed. Add a thread to your original post on the discussion board reflecting on how your views have changed and why you now think differently. Again, this posting should contain examples and personal experiences to support your views. This is due **April 23<sup>rd</sup>**.

### **Facility Design**

You will design a facility of your choice to be utilized by a secondary school agriculture program. The facility should be drawn to scale from a birds-eye view and be adequately labeled. Additional requirements are listed on the assignment rubric. **Due April 2<sup>nd</sup>**.

### **Portfolio**

You will develop three components/sections regarding agricultural laboratories. The topic outline will be:

- Agricultural Laboratory Tools (Pictures and Prices)
- Agricultural Laboratory Articles (1 per week on the topic)
- Agricultural Laboratory Photographs (2 action photos/caption for each lab experience)

Each section includes distinct assignments related to each laboratory setting discussed in class. Individual components to be included on each page are itemized on the rubric. Sections should each be created according to the rubric requirements. More information can be found on the assignment rubric. *Note - It is recommended that you work on this assignment throughout the class rather than wait until right before the due date. It is possible there will be two announced portfolio checks during the semester.*  
**Due April 24<sup>th</sup>**

### **Skills Assessment Tool**

You and a partner will be responsible for developing a skills assessment that assesses students' skills during one of the in-class or laboratory trips. The assessment should adequately measure students' skills in the particular laboratory setting selected. You are responsible for having a working draft of your assessment constructed one week prior to the lab using Microsoft Word and shared with Mrs. Barry for review purposes (please email this draft). You will lead this skill assessment at the lab site or in-class for the related topic. Final submission to Canvas will be due the Monday before the in-class or off-site lab. Due dates will vary, depending on your topic. Laboratory activities will be signed up for during the first week of class. Specific requirements are included on the rubric. Please see Mrs. Barry in advance to discuss your lab, and applicable skills to assess.

### **Student-led Laboratory Activity**

You and a partner will come up with an in-class lab activity that can be related to any agriscience topic. This lab activity must be able to be completed within 45 minutes. Your lab activity should include a lesson plan (template can be found on Canvas), any necessary lesson content, and most importantly, a laboratory component. Your lab activity materials must be submitted to Canvas one week prior to your presentation.

### **Questions for Laboratory Site Visits**

You will be responsible for creating a minimum of 2 unique questions for each off-site laboratory visit, as well as a panel discussion in April. You will post your unique questions on Canvas under the corresponding lab visit post in the discussions area by Monday at midnight prior to each off-campus laboratory site visit/panel discussion. You should not post a similar question that has been previously posted.

### **Safety Exam**

You will design a safety exam for the laboratory of your choice. The safety exam should be set up to be taken by students before they are permitted to work in the laboratory. The exam should be of appropriate length to adequately assess necessary safety aspects, and should include a variety of question formats as is warranted by the safety aspects. You are responsible for meeting with Mrs. Barry 1 week prior to your topic-related laboratory site visit. You should have a working draft of your safety exam constructed prior to your meeting. Additional requirements are included in the rubric. Your safety exam is due the Tuesday following the laboratory experience.

### **Reflection**

Following each off-campus laboratory site visit, you will be required to complete a half-page reflection that is due prior to Tuesday's class submission through Canvas. Reflections should account for the following: how information gathered during the laboratory site visit can be used within your classroom instruction, curriculum, SAE, and FFA. The mentioned topics are strongly suggested, but not comprehensive.

### **Participation, Attendance, Reflection,**

Attendance is mandatory, and you are expected to be an active participant in the class discussions and exercises. If you must miss class, please let me know as soon as possible to see if circumstances warrant an exception. Instructions for other assignments will be given in class.

<b>COURSE ASSIGNMENTS</b>	<b>Percent of Final Grade</b>	<b>Due Dates by Midnight*</b>
Portfolio	20	April 24 <sup>th</sup>
Safety Exam	10	My date:
Skills Assessment	10	My date:
Design of Laboratory Facility	10	Apr. 3rd
Discussion Posting (2)	10	Jan 16 <sup>th</sup> & Apr 24 <sup>th</sup>
Reflections	10	Continuous
Developed questions for each laboratory site visit	10	Continuous
Student Led Laboratory Activity	10	My date:
Active Participation, Attendance	10	Continuous

### **Grading Scale**

A = 93-100%  
A- = 90-92%  
B+ = 86-89%  
B = 83-85%

B- = 80-82%  
C+ = 76-79%  
C = 73-75%  
C- = 70-72%

D+ = 66-69%  
D = 63-65%  
D- = 60-62%  
E = below 60%

*Note:* This Web address references the UF grades and grading policies:

<http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html>

### **Attendance and Assignments**

Students' class attendance and participation are required. There are a total of 15 potential class meetings. Late work will only be accepted up to 2 days past the due date, with a 10% reduction in score for each day it is late.

Any time instruction is missed, for any reason, it will count as an absence. In case of emergencies, arrangements for completing assignments should be made immediately upon return to campus.

### **Use of technology during instruction**

The use of personal cell phones, i-pads, computers, and other electronic devices may be utilized during instruction. However, the use of these items should be limited to appropriate and designated times during the course. Misplaced text messaging will be noted by the instructor, ONE warning will be given, after which unauthorized texting (use of an electronic device) will be counted as an absence and will result in a 5% total reduction of the final course grade.

### **Academic Honesty**

In 1995 the UF student body enacted a new 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.

In adopting this honor code, the students of the University of Florida recognize that academic honesty and integrity are fundamental values of the university community. Students who enroll at the university commit to holding themselves and their peers to the high standard of honor required by the honor code. Any individual who becomes aware of a violation of the honor code is bound by honor to take corrective action. The quality of a University of Florida education is dependent upon community acceptance and enforcement of the honor code.

### **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."**

The university requires all members of its community to be honest in all endeavors. A fundamental principle is that the whole process of learning and pursuit of knowledge is diminished by cheating, plagiarism and other acts of academic dishonesty. In addition, every dishonest act in the academic environment affects other students adversely, from the skewing of the grading curve to giving unfair advantage for honors or for professional or graduate school admission. Therefore, the university will take severe action against dishonest students. Similarly, measures will be taken against faculty, staff and administrators who practice dishonest or demeaning behavior.

Students should report any condition that facilitates dishonesty to the instructor, department chair, college dean or Student Honor Court.  
*(Source: 2012-2013 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. Both the Counseling Center and Student Mental Health Services provide 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. The Counseling Center is located at 301 Peabody Hall (next to Criser Hall). Student Mental Health Services is located on the second floor of the Student Health Care Center in the Infirmary.

- *University Counseling Center*, 301 Peabody Hall, 392-1575, [www.counsel.ufl.edu](http://www.counsel.ufl.edu)
- *Career Resource Center*, CR-100 JWRU, 392-1601 ext: 0, [www.crc.ufl.edu/](http://www.crc.ufl.edu/)
- *Student Mental Health Services*, Rm. 245 Student Health Care Center, 392-1171, [www.shcc.ufl.edu/smhs/](http://www.shcc.ufl.edu/smhs/)

Alcohol and Substance Abuse Program (ASAP)  
Attention Deficit Hyperactivity Disorder (ADHD)  
Center for Sexual Assault / Abuse Recovery & Education (CARE)  
Eating Disorders Program  
Employee Assistance Program  
Suicide Prevention Program

## **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, 392-8565, [www.dso.ufl.edu/drc/](http://www.dso.ufl.edu/drc/)

## **U Matter, We Care**

Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu) so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

## **Florida Educator Accomplished Practices (FEAPs)**

In this course, one or more assignments have been selected as “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

- 1f – Develops learning experiences that require students to demonstrate a variety of applicable skills and competencies
- 2a – Organizes, allocates, and manages the resources of time, space, and attention
- 3e – Relate & integrate the subject matter with other disciplines and life experiences

## **Tentative AEC 4228 Course Calendar**

<b>Class Meeting</b>	<b>Topic</b>	<b>Location</b>
T - Jan 8 <sup>th</sup>	Introduction Scientific method, Inquiry, and lab instruction Syllabus questions	102 PEPC
T - Jan. 15 <sup>th</sup>	Laboratory safety, Evaluating student work in the Lab & Lab prep	102 PEPC
T - Jan 22 <sup>nd</sup>	Using simulations Using resources for labs Food science	102 PEPC
T – Jan 29 <sup>th</sup>	Horticulture/Plant science	102 PEPC
T – Feb 5 <sup>th</sup>	Community Gardens <b>Lab Site Visit</b> after class session.	102 PEPC and Plant City Commons Community Garden (at HCC Plant City)
T - Feb. 12 <sup>th</sup>	<b>Lab Site Visit:</b> Veterinary Assisting	George Jenkins HS: 1:30pm (sign in at 1:15pm)
T- Feb 19 <sup>th</sup>	<b>Lab Site Visit:</b> Meats Lab	Hicks Custom Meats: 1:00pm
T- Feb. 26 <sup>th</sup>	<b>Lab Site Visit:</b> Animal Science	Simmons Career Center: 3:00pm (sign in at 2:45pm)
T- Mar. 5th	<i>No Class – Spring Break</i>	
T- Mar. 12 <sup>th</sup>	The science behind the experience & Designing in-class labs— w/Dr. Osborne	102 PEPC
T- Mar. 19 <sup>th</sup>	Student Laboratory Activity Groups 1-2	102 PEPC
T – Mar. 26 <sup>th</sup>	Student Laboratory Activity Groups 3-4	102 PEPC
T – April 2 <sup>nd</sup>	<b>Lab Site Visit:</b> School Gardens	Lincoln Academy: Time TBA (Lakeland)
T - April 9 <sup>th</sup>	Management of the lab facility <b>Guests:</b> Kelli Kennedy	102 PEPC
T - April 16 <sup>th</sup>	<b>Lab Site Visit:</b> Tractor Operations	GCREC: 1:00-3:00pm
T- April 23 <sup>rd</sup>	<b>Lab Site Visit:</b> Aquaculture	1-3pm Tropical Research Center, Ruskin