Overview
This course introduces students to agricultural systems as ecosystems governed by the same ecological processes governing all natural systems. Students will learn about the ecological processes controlling soil-water-plant interactions as well as the capture and use of solar energy in the biosphere. Students will also examine biotic interactions in agricultural systems and a variety of farming practices in the context of sustainability. Weekly videos and readings will prepare you to complete weekly quizzes and four exams. Readings and web resources will class discussions. Recorded, narrated field excursions will provide students with a field perspective on special topics and additional information needed to complete two assignments. We will also work in groups and as a class to shed some light (perspectives and data) on current agriculturally related issues in Florida.

Course Goals
By the end of the course, students should be to…
1. Generalize how general ecological principles apply to agricultural systems.
2. Describe how crops interact with biotic and abiotic factors in the environment.
3. Discuss practices of conventional agriculture that identify natural resources and present barriers to sustainability.
4. Assess agricultural practices and formulate alternative methods that promote sustainability, technology, and research initiatives that represent possibilities for long-term sustainability in agriculture.
5. Evaluate and discuss scientific resources reporting on research and technology in agriculture.

Prerequisites: None


Required Technology: Access to a computer that can utilize Proctor U

Course Website: This course will be conducted entirely online through the Canvas learning management system. You are responsible to check Canvas often for announcements and updates.

Grades and Evaluation
There are 1000 points awarded in this class. I hope to provide a variety of diverse opportunities for you to engage with and demonstrate mastery of the content.

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction in Discussion</td>
<td>15</td>
</tr>
<tr>
<td>Syllabus Quiz</td>
<td>15</td>
</tr>
<tr>
<td>Quizzes 13 @ 25 pts</td>
<td>300*</td>
</tr>
<tr>
<td>Discussions 3 @30 pts</td>
<td>90</td>
</tr>
<tr>
<td>Assignments 2 @ 40 pts</td>
<td>80</td>
</tr>
<tr>
<td>Exams 4 @ 100 pts</td>
<td>400</td>
</tr>
<tr>
<td>Spotlight FL Group Project</td>
<td>100</td>
</tr>
</tbody>
</table>

**FINAL GRADING Scale (Points):**

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>930-1000</td>
<td>A</td>
</tr>
<tr>
<td>900-929</td>
<td>A-</td>
</tr>
<tr>
<td>870-899</td>
<td>B+</td>
</tr>
<tr>
<td>830-869</td>
<td>B</td>
</tr>
<tr>
<td>800-829</td>
<td>B-</td>
</tr>
<tr>
<td>770-799</td>
<td>C+</td>
</tr>
<tr>
<td>730-769</td>
<td>C</td>
</tr>
<tr>
<td>700-729</td>
<td>C-</td>
</tr>
<tr>
<td>670-699</td>
<td>D+</td>
</tr>
<tr>
<td>630-669</td>
<td>D</td>
</tr>
<tr>
<td>620-609</td>
<td>D-</td>
</tr>
<tr>
<td>0-590</td>
<td>E</td>
</tr>
</tbody>
</table>

*Lowest quiz grade is dropped
<table>
<thead>
<tr>
<th>Date</th>
<th>Course Material</th>
<th>Actions By You</th>
<th>Due Date</th>
</tr>
</thead>
</table>
| Week 1 Jan 7 | Introduction Using Primary Literature  
Week 1 Jan 7 | Introduce Yourself  
Quiz 01 (Syllabus Quiz)  
Spotlight FL Discussion: What do you know | Sun Jan 13  
Sun Jan 13  
Sun Jan 13 |
| Week 2 Jan 14 | Tenets of Modern Agriculture  
Ecosystem Organization  
Carbon and Energy | Quiz 02  
Discussion 1-first post due | Sun Jan 20  
Sun Jan 20 |
| Week 3 Jan 21 | Light and Temperature  
Nutrients | Quiz 03  
Discussion 1-responses due | Sun Jan 27  
Sun Jan 27 |
| Week 4 Jan 28 | Wind and Fire | - | - |
| Week 5 Feb 4 | Water in Agriculture  
Examining U.S. Ag with GIS  
Dryland Agriculture | Exam 1 Closes  
Quiz 05  
Discussion 2-first post due | Mon Feb 4  
Sun Feb 10  
Sun Feb 10 |
| Week 6 Feb 11 | Fertilizer  
Fertilizers in the Environment | Quiz 06  
Discussion 2 responses due  
Spotlight FL: Discussing the science | Sun Feb 17  
Sun Feb 17  
Sun Feb 17 |
| Week 7 Feb 18 | 1-Soils Decomposition  
2-Soil Organisms | Quiz 07  
VFT 1 Water Quality Assignment  
Exam 2 Opens | Sun Feb 24  
Sun Feb 24  
Sun Feb 24 |
| Week 8 Feb 25 | Biotic Interactions in agroecosystems: the processes | Exam 2 Closes  
Quiz 08 | Mon Feb 25  
Sun Mar 3 |
| Week 9 Mar 4 | Spring Break | - | - |
| Week 10 Mar 11 | 1-Biotic Interactions in agroecosystems: the players | Quiz 09 | Sun Mar 17 |
| Week 11 Mar 18 | Biotic Interactions in agroecosystems: management | Quiz 10  
Spotlight Group Paper | Sun Mar 24  
Sun Mar 24 |
| Week 12 Mar 25 | Biotic Interactions in agroecosystems: case studies | Quiz 11  
VFT 2- Insect collection  
Exam 3 Opens | Sun Mar 31  
Sun Mar 31  
Sun Mar 31 |
| Week 13 Apr 1 | Ranching/Animal Husbandry | Exam 3 Closes  
Quiz 12  
Spotlight Peer Review | Mon Apr 1  
Sun Apr 7  
Sun Apr 7 |
| Week 14 Apr 8 | Integrated Pest Management  
Host Plant Resistance  
Genetic Engineering | Quiz 13  
Discussion 3-first post due  
Spotlight FL Review & Reflection | Sun Apr 14  
Sun Apr 14  
Sun Apr 14 |
| Week 15 Apr 15 | Looking Ahead-Whole System Agriculture and Research | Quiz 14  
Discussion 3 ends  
Exam 4 Opens | Sun Apr 21  
Sun Apr 21  
Sun Apr 21 |
| Week 16 Apr 22 | No topics | Exam 4 Closes | Wed Apr 23 |
**First Week Details**
The first week of class there are several small tasks to complete.

1. Complete an INTRODUCTION OF YOURSELF (15 pts.) on the Discussion board that includes your major, current standing, interest in the course topics, experience within agriculture…and a photo of yourself, pet, or favorite place.
2. You must complete an open-book SYLLABUS QUIZ (15 pts.) available in Canvas.
3. You must respond to Spotlight Florida Discussion (10 points).

**Assessment Details**
There are 13 mandatory weekly QUIZZES worth 25 points each (300 points total because I drop the lowest grade) based on the content of the videos and readings listed for that week. The quizzes will be taken online via the Canvas course site. The questions will be multiple choice and short answer drawn from a large question bank. You can take each quiz three times and I will use the highest score. The quizzes should be taken individually, not in a group. The quizzes are open note (you may use your class notes). You must complete the quizzes by Sunday at midnight of that week. Therefore, it is important that you read and watch the materials listed for each week in a timely manner. There are no makeup opportunities for missed quizzes unless the absence is excused. However, I do understand life happens and I drop the lowest quiz grade.

There are 3 mandatory DISCUSSIONS (30 pts. ea.) over the course of the semester that will involve written discussion of select agricultural ecology topics via the Discussion tool in Canvas. The first week the Discussion is open, you must respond to the question I post. You will have a week to do so. Your post should be a thoughtful response and should involve outside reference material from the internet or primary literature (as indicated in the instructions for that week (properly cited in APA format). Your thorough post should end with a question or questions posed to your classmates that will move the discussion forward. The second week of discussion, you will make 3 responses to the posts of other classmates. These posts also must be substantial (not, “I agree” or “I disagree”), include outside reference material. There are no make-up opportunities for missed discussions unless the absence is excused.

There are 2 VIRTUAL FIELD TRIP ASSIGNMENTS (40 pts. ea.). These assignments are completed after watching the corresponding pre-recorded videos. They will require you to assess a nearby body of water and complete an insect photo safari. Specific instructions for each assignment will be provided in the corresponding assignment link and video.

The SPOTLIGHT FL GROUP PROJECT (100 pts.) is a combination of individual and group work that includes two discussion posts, a short paper on the nutrient issues and red tide the state is experiencing, a peer review, and a written reflection on the project. I will have very explicit details in the announcements and assignment link.

Four, one-hour, non-cumulative, PROCTORED EXAMS (100 pts. ea.) are taken online in Canvas. They are closed book and will contain, multiple choice and short answer questions. Exams open on Sundays at 7 AM and close Mondays at midnight so that you have TWO DAYS in which to complete your exam (note: the last exam is open for 4 days).

**Please note that this course requires the use of Proctor U for all four exams!**

ProctorU is a live online proctoring service that allows you to take your exam from the comfort of your home. ProctorU is available 24/7, however you will need to schedule your proctoring session at least 72 hours in advance to avoid additional scheduling fees.

Creating a ProctorU account is very simple. All you will need to do is visit go.proctoru.com. ProctorU provides free technical support to ensure you have the best testing situation possible. That is
available at [www.proctoru.com/testitout](http://www.proctoru.com/testitout). On this page you will also be able to test your equipment, learn about what to expect during your proctoring session, and ask any questions you may have about the proctoring process with a ProctorU representative.

In order to use ProctorU you will need to have a high-speed internet connection, a webcam (internal or external), a Windows or Apple Operating System, and a government-issued photo ID. ProctorU recommends that you visit proctoru.com/testitout prior to your proctoring session to test your equipment. For additional technical services needed before your exam, you can click on the button that says “connect to a live person.”

**Extra Credit**

You have one opportunity. Sometime in the first month of class, you need to either arrange to meet with me or call me. I like to touch base with every student in the class to get to know you a bit on a personal level--- find out where you are coming from, where you are headed with your degree and how we can work together to insure you have a positive experience during the course. This will earn you 10 extra points.

**Absences and Make-Up Work**

Assignment deadlines are listed in the course outline above as well as on the calendar on the course website. It is your responsibility to make sure assignments are submitted through the assignment links in Canvas (NOT to my email account). I will accept virtual field trip assignments late, but there is a 10 percent deduction each day past a deadline. Quizzes, discussions, and exam deadlines will not be extended without a documented excuse.

Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

**Course Evaluation**

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. These evaluations are conducted online at https://evaluations.ufl.edu. Evaluations are typically open for students to complete during the last two or three weeks of the semester; students will be notified of the specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results.

**Student Complaints**

For an online course, students can report complaints to: [http://www.distance.ufl.edu/student-complaint-process](http://www.distance.ufl.edu/student-complaint-process)

**Academic Honesty**

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following 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.*” You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit 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.”

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and
comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: http://www.dso.ufl.edu/scrc/process/student-conduct-honor-code.

**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.

**Services for Students with Disabilities**
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, www.dso.ufl.edu/drc/

**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

Counseling Services Groups and Workshops Outreach and Consultation Self-Help Library Wellness Coaching

U Matter We Care, www.umatter.ufl.edu/

Career Connections Center, First Floor JWRU, 392-1601, https://career.ufl.edu/