



ALS 5156: Agricultural Ecology

Course Details

- ❖ Online, asynchronous conducted via Canvas
- ❖ No prerequisites

Instructor

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Required Text

Gliessman, Stephen R.
Agroecology: The Ecology of Sustainable Food Systems. Third Edition. Boca Raton, FL: CRC Press, 2015.

Grading Scale

Overview

This course introduces students to agricultural systems as ecosystems governed by the same ecological processes governing 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.

Objectives

By the end of the course, students will be able to:

1. Examine how general ecological principles apply to agricultural systems.
2. Identify how crops interact with biotic and abiotic factors in the environment.
3. Analyze the interactions between agriculture and natural ecosystems.
4. Assess practices, technology, and research that represent possibilities for long-term sustainability in agriculture.
5. Evaluate potential issues in agricultural settings and create solutions.
6. Research a topic in agricultural ecology using the primary literature and create a 20 minute lecture-style presentation.

Grades and Evaluation

There are 1100 points awarded in this class. I provide a variety of diverse opportunities for you to engage with the content and demonstrate mastery. For information on current UF policies for assigning grade points, see <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>.

Introduction in Discussion	10
Syllabus Quiz	10
Quizzes 13 @ 25 pts	300
Discussions 4 @ 40 pts	160
Assignments 3 @ 40 pts	120
Exams 4 @ 100 pts	400
Research and presentation project	100

First Week Details

1. Complete the Introduction of yourself on the Discussion board (10 pts.).
2. Complete the open-note Syllabus Quiz (10 pts.).

Graded Assessments

There are 13 weekly **TIMED 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 open on Monday at 7 am and remain open until Sundays at midnight. Quizzes are accessed and submitted online via the Canvas course site. The questions will be multiple choice and short answer drawn from a large question bank. Quizzes are taken 3 times and I use the highest score. The quizzes are open note. Therefore, it is important that you read and watch the materials listed for each week in a timely manner. Because the quizzes are open for an entire week, there are no makeup opportunities for missed quizzes unless the absence is excused. However, I do understand life happens so I drop the lowest quiz grade.

There are 4 mandatory **DISCUSSIONS** (40 pts. ea.) that 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 and properly cited in APA format). In every discussion, you will have in-text citations and a Work Cited, EVEN if you use references I provide. 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 that is properly cited. There are no makeup opportunities for missed discussions unless the absence is excused. If you miss the deadline to post at the end of week one, you can't earn late points for submission, but you can still earn the points for responding to classmates the following week.

There are 3 **ASSIGNMENTS** (40 pts. ea.). Two assignments are virtual field trips. To complete the assignments, you watch a video and then actually go outside to complete an activity. In one assignment, you assess a nearby body of water and, in the other, you complete an insect photo assignment (that one can take a significant amount of time so don't wait until the last minute). The third assignment will involve an investigation of Florida agriculture. Specific instructions for each assignment will be provided in the corresponding assignment link and videos. Please look at them well in advance of the due date as it is crazy hard to take acceptable pictures of insects or water bodies at night the day before the assignments are due.

Four, one-hour, **PROCTORED EXAMS** (100 pts. ea.) are taken online in Canvas. They are closed book and will contain multiple choice and short answer questions. They will be proctored using **Honorlock**. Details regarding the use of Honorlock including expectations for your exam area and behavior during the exam are provided on the Canvas course site.

Exams 1-3 will open on Mondays at 7 AM and close Wednesdays at midnight as noted on the course calendar above so that you have **THREE DAYS** in which to complete your exam.

Exam 4 is **NOT CUMULATIVE** and will open Monday, April 18th at 7 am through Wednesday April 20th at midnight.

Students will select a topic in agricultural ecology (approved by instructor in the first 4 weeks of the semester) to research more in depth and craft a 15-20 minute **PRESENTATION** (100 points) delivered live over Zoom for instructor. The presentation must include at least 3 research-based references. A rubric will be provided in Canvas.

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/UGRD/academic-regulations/attendance-policies/>.

Week	Date	Course Material	Actions by You	Date
1	Jan 5	Introduction Using primary literature	Introduction Discussion Syllabus Quiz	1/9 1/9
2	Jan 10	Tenets of modern ag Ecosystem organization Carbon and Energy	Quiz 2 Discussion 1- first post due	1/16 1/16
3	Jan 17	Light and temperature Nutrients	Quiz 3 Discussion 1- responses due	1/23 1/23
4	Jan 24	Wind and Fire	Quiz 4 & Grad topic approval	1/30
5	Jan 31	Water in ag Examining US ag with GIS Dryland Ag	Exam 1 (Weeks 1-4) opens Exam 1 closes Quiz 5 Discussion 2 first post due	1/31 2/02 2/06 2/06
6	Feb 7	Fertilizer Fertilizer in the environment	Quiz 6 Discussion 2 responses due	2/13 2/13
7	Feb 14	Soils Decomposition Soil organisms	Quiz 7 VFT 1: Water Quality Assignment	2/20 2/20
8	Feb 21	Biotic interactions: the processes	Exam 2 (Weeks 5-7) opens Exam 2 closes Quiz 8	2/21 2/23 2/27
9	Feb 28	Biotic interactions: the players	Quiz 9 Discussion 3 first post due	3/6 3/6
10	Mar 7	SPRING BREAK No new topics		
11	Mar 14	Biotic interactions: management	Quiz 10 Discussion 3 responses due	3/20 3/20
12	Mar 21	Biotic interactions: case studies	Quiz 11 VTF 2- Insect Photo Collection	3/27 3/27
13	Mar 28	Landscape, diversity, fragmentation Polyculture	Exam 3 (Weeks 8-11) opens Exam 3 closes Quiz 12 Grad Presentation	3/28 3/30 4/3 4/3
14	Apr 4	Agroforestry, crop rotation IPM, HPR	Quiz 13 Discussion 4 first post due	4/10 4/10
15	Apr 11	Animals in ag Genetic engineering Agroecology	Quiz 14 VFT 3- Florida Agriculture Discussion 4 responses due	4/17 4/17 4/17
16	Apr 18	No new topics	Exam 4 (Weeks 12-14) Exam 4 closes	4/18 4/20

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."*

You must 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/SCCR/honorcodes/honorcode.php>.

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.

COVID response

This course is conducted asynchronously such that you are not required to attend at specific times and all course materials are available in the course.

In the event that we utilize zoom for a meeting, students who participate in Zoom meetings with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off during any meetings you request and do not use a profile image. Likewise, students participating orally in Zoom meetings are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded, you will need to communicate exclusively with instructors via email. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

Online 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. 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: <https://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 <https://ufl.bluera.com/ufl/>.

Summaries of course evaluation results are available to students at: <https://gatorevals.aa.ufl.edu/pucode>.

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, <https://disability.ufl.edu/>

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/>.*
- Student Success Initiative, <http://studentsuccess.ufl.edu>. Student Complaints:

Student Complaints

- Residential Course: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>.
- Online Course: <http://www.distance.ufl.edu/student-complaint-process>