



ALS 5156: Agricultural Ecology

Every Fall and Spring

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

A ≥ 1023 pts. D+ ≥ 737 pts.
A- ≥ 990 pts. D ≥ 693 pts.
B+ ≥ 957 pts. D- ≥ 660 pts.
B ≥ 913 pts. E < 660 pts.
B- ≥ 880 pts.
C+ ≥ 847 pts.
C ≥ 803 pts.
C- ≥ 770 pts.

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 and review a topic in agricultural ecology using the primary literature.

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. Rubrics and feedback will be provided in the assignment pages in Canvas. For information on current UF policies for assigning grade points, see <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>.

Introduction in Discussion	15
Syllabus Quiz	15
Quizzes 13 @ 25 pts	300
Assignments 3 @ 40 pts	120
Perusal Assignments 6 @ 25 pts	150
Exams 4 @ 100 pts	400
Lit Review meeting	10
Literature Review	90

First Week Details

1. Complete the Introduction of yourself on the Discussion board (15 pts.).
2. Complete the open-note Syllabus Quiz (15 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. Each week I will provide a “what you missed” document that goes over the most missed questions on the quiz. If you want to discuss your quiz results, contact the instructor or TA directly. 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 **3 ASSIGNMENTS** (40pts. ea.). Two assignments are “virtual field trips.” To complete the assignments, you watch a video and then venture outside to complete an activity on your own. 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 researching a Florida agriculture commodity (NOT CITRUS). 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 hard to take acceptable pictures of insects or water bodies at night the day before the assignments are due.

There are **6 PERUSALL ASSIGNMENTS** (25 pts. ea.) *Perusall* is a social annotation tool that helps you master readings faster, understand the material better, and get more out of your classes. To achieve this goal, you will be collaboratively annotating 6 assigned readings with others in your class. The help you'll get and provide your classmates (even if you don't know anyone personally) will get you past confusions quickly and will make the process more fun. While you read, you'll receive rapid answers to your questions, help others resolve their questions (which also helps you learn). You can start a new annotation thread in *Perusall* by highlighting text, asking a question, or posting a comment; you can also add a reply or comment to an existing thread. Each thread is like a chat with one or more members of your class, and it happens in real time. Your **goals** in annotating each reading assignment are *to stimulate discussion by posting good questions or comments* and *to help others by answering their questions*. Instructions, rubrics, and deadlines will be provided in Canvas.

Four, 90-minute, **PROCTORED EXAMS** (100 pts. ea.) are taken online in Canvas. They are closed book and will contain multiple choice, short answer, and essay questions. Graduate exams differ from undergraduate exams. 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 are not cumulative and will open on Mondays at 7 AM and close Wednesdays at midnight as noted on the course calendar so that you have THREE DAYS in which to complete your exam.

All graduate students will write a **LITERATURE REVIEW** (90 pts.) on a topic in agricultural ecology. Students will work with the instructor to develop a question of appropriate scope prior to Feb. 5 (10 points) The literature review must involve novel research of the literature conducted in the fall semester for this course and utilize at 6-10 research-based references and be at least 3 pages in length. A detailed 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/>.

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.

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>

Week	Course Material	Actions by You
1	Introduction Using primary literature	Introduction Discussion Syllabus Quiz
2	Tenets of modern ag Ecosystem organization Carbon and Energy	Quiz 2 Perusall 1
3	Light and temperature Nutrients	Quiz 3 Grads: Lit Review Topic
4	Wind and Fire	Quiz 4 Perusall 2
5	Water in agriculture	Exam 1 (Weeks 1-4) opens Exam 1 closes Quiz 5
6	Fertilizer Fertilizer in the environment	Quiz 6 Perusall 3
7	Soils//Decomposition Soil organisms	Quiz 7 Assignment: Water Quality
8	Biotic interactions: the processes	Exam 2 (Weeks 5-7) opens Exam 2 closes Quiz 8
9	Biotic interactions: the players	Quiz 9 Perusall 4
10	Biotic interactions: management	Quiz 10 Assignment - Florida Ag
11	Biotic interactions: case studies	Quiz 11 Perusall 5
12	Landscape, diversity, fragmentation Polyculture	Exam 3 (Weeks 8-11) opens Exam 3 closes Quiz 12
13	Agroforestry, crop rotation IPM, HPR	Quiz 13
14	No new topics	Assignment - Insect Photo Collection
15	Animals in agriculture Genetic engineering/ Agroecology	Quiz 14 Perusall 6 Grads: Lit Review
16	No new topics	Exam 4 (Weeks 12-14) Exam 4 closes