

ALS 5156: Agricultural Ecology

Course Details

- Online, asynchronous conducted via Canvas
- No prerequisites

Instructor

Jennifer Weeks Steinmetz Entomology Bldg. Room 3103, 273-3955 Jenweeks1@ufl.edu

Teaching Assistant

Christian Kammerer Steinmetz (Entomology) Bldg. Room 2236, 904-810-8088 kammech@ufl.edu

Required Text

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

Grading Scale

A	≥1023 points
A-	≥990 points
B+ B	≥957 points >913 points
В-	≥880 points
C+	≥847 points
C	≥803 points
C-	≥770 points
D+	≥737 points

D ≥693 points

D- ≥660 points

E <660 points

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.

Course Goals

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.

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
Lit review or presentation.	100

First Week Details

The first week of class there are several small tasks to complete.

- 1. Complete an INTRODUCTIONOFYOURSELF(10pts.) 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. Complete an open-book SYLLABUS QUIZ (10 pts.).

There are 13 weekly <u>TIMED QUIZZES</u> 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. You will get to take each quiz **three times** and I will use the highest score. The quizzes should be taken individually, notin a group. **The quizzes are open note (you can use your class notes).** 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 <u>DISCUSSIONS</u> (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). 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 make up 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 to 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 be open Monday, Dec 6th at 7 am through Wednesday December 8th at midnight.

Students will select a topic in agricultural ecology (approved by instructor) to research and either (1) write a LITERATURE REVIEW OR (2) craft a 15-20 minute PRESENTATION (100 points) delivered live over Zoom or as a voice-annotated Powerpoint. The presentation must include at least 6 research-based references.

Week	Date	Course Material	Actions by You	Date
1	Aug 23	Introduction	Introduction Discussion	8/29
		Using primary literature	Syllabus Quiz	8/29
2	Aug 30	Tenets of modern ag	Quiz 2	9/5
		Ecosystem organization	Discussion 1- first post due	9/5
		Carbon and Energy		
3	Sep 6	Light and temperature	Quiz 3	9/12
		Nutrients	Discussion 1- responses due	9/12
4	Sep 13	Wind and Fire	Quiz 4	9/19
5	Sep 20	Water in ag	Exam 1 (Weeks 1-4) opens	9/20
		Examining US ag with GIS	Exam 1 closes	9/22
		Dryland Ag	Quiz 5	9/26
			Discussion 2 first post due	9/26
6	Sep 27	Fertilizer	Quiz 6	10/3
		Fertilizer in the environment	Discussion 2 responses due	10/3
7	Oct 4	Soils	Quiz 7	10/10
		Decomposition	VFT 1: Water Quality	10/10
		Soil organisms	Assignment	
8	Oct 11	Biotic interactions: the	Exam 2 (Weeks 5-7) opens	10/11
		processes	Exam 2 closes	10/13
			Quiz 8	10/17
9	Oct 18	Biotic interactions: the players	Quiz 9	10/24
			Discussion 3 first post due	10/24
10	Oct 25	Biotic interactions:	Quiz 10	10/31
		management	Discussion 3 responses due	10/31
11	Nov 1	Biotic interactions: case	Quiz 11	11/7
		studies	VTF 2- Insect Photo Collection	11/7
12	Nov 8	Landscape, diversity,	Exam 3 (Weeks 8-11) opens	11/8
		fragmentation	Exam 3 closes	11/10
		Polyculture	Quiz 12	11/14
13	Nov 15	Agroforestry, crop rotation	Quiz 13	11/21
		IPM, HPR	Discussion 4 first post due	11/21
14	Nov 22	Thanksgiving	VFT 3- Florida Agriculture	11/28
		No new topics	Discussion 4 responses due	11/28
		Work on Assignment 3		
15	Nov 29	Animals in ag	Quiz 14	12/5
		Genetic engineering		
		Agroecology		
16	Dec 6	No new topics	Exam 4 (Weeks	12/6
			12-14) Exam 4 closes	12/8 12/8
			Grad Project due	12/8

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

Absences and Make up Work

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/.