ALS 3133 Agriculture & Environmental Quality

Online Format

Course Details	 3 Credits BSC2005 or similar prerequisite No textbook Canvas course website accessible through http://elearning.ufl.edu/ 				
Course Description	Analysis of the effects of agriculture on environmental quality with emphasis on agricultural wastes and practices, the potential for using agricultural systems for disposal of other wastes and the effects of pollution on the agricultural environment.				
Class Meetings & Format	 Online Format Asynchronous Lectures, activities & required readings in Canvas 	 Chat Sessions Live, Wed @ noon Zoom link in Canvas Recommended, not required 			
Course Instructor	Heather Enloe, PhD heather.enloe@ufl.edu 325-294-3139 Office Hours: Wednesday chat sessions or by appointment Preferred contact: Canvas email or chat sessions.	TBD			

Student Learning Objectives:

- Predict the movement of nutrients and pesticides based on soil characteristics.
- Sketch the nitrogen and phosphorus cycles and identify transformations in each.
- Describe the components of a basic nutrient management plan.
- Identify best management practices for soil conservation and for maintaining water quality.
- Assess the environmental benefits and concerns with biofuels.
- Compare aerobic and anaerobic composting techniques.
- Discuss current issues with the production and disposal of animal wastes and food wastes.

Student and Instructor Expectations

My goal is to provide a welcoming atmosphere and to help you learn something new and unexpected within the topics covered in this class. As this is an introductory course, I will introduce you to other relevant 4000 level courses and/or potential internships.

For this course to run smoothly, I expect students to:

- A. <u>Participate</u> in course materials & through assessments on a regular basis. Attend chat sessions if your work/family situation allows.
- B. Check Canvas for announcements at least twice a week.
- C. Answer all questions using your own words.
- D. Extra Time on Exams. Exams are designed to be completed in 20 minutes. Everyone will be provided 2 x time (40 min) on exams.
- E. <u>Late Policy</u>. Extra time has been incorporated into the due dates. After the first week, all assignments and quizzes are open for at least 2 weeks, have a due date, and have a separate date when the assignment closes. No points are deducted for assignment received before the assignment closes. Turn in assignments & quizzes on time or earlier.
- F. <u>Illness & Extenuating Circumstances</u>. Documentation is required to make-up missed assignment and quizzes and exams. Obtain an Instructor Notification from UF CARE. Instructors are provided in the Course Orientation Module.
- G. If needed, contact your college by the deadline to drop a course for medical reasons. You can petition the <u>Dean of Students Office</u> to drop a course for medical reasons.
- H. Email & phone correspondence is for setting a meeting time for office hours.
- I. <u>Student-Instructor Communication Tool</u>. If you think a quiz question has been graded unfairly or if you missed a quiz or assignment deadline, please use this tool in the Assignments section in Canvas. Include in the body of your post the specific lecture, assignment, or quiz information (i.e., Quiz 2, Question 4). I will take this information into consideration when calculating the final grade at the end of the semester.

Course Description and Statement of General Education Purpose

This course is intended for all majors. Students within Ag and Life Sciences majors will obtain significant value from the topics covered and will be provided with information on relevant 4000 level courses (i.e., the next step), graduate courses, and certifications.

Agricultural scientists can minimize agricultural pollution while sustaining adequate food production. Furthermore, agricultural lands are called upon to receive wastes produced by modern society. This course introduces students to the science behind agriculture. As this course is offered through the soil, water, & ecosystem sciences department, we emphasize the role of soil in nutrient cycling and best management practices. Course topics begin with a primer on (i) soil formation and (ii) nutrient cycling, both of which are necessary for all ecosystems to function. As the course progresses, students will learn about complex topics such as:

- nonpoint source pollution & eutrophication;
- best management practices for water, nutrient, animal wastes, and pests;
- constructed wetlands & agriculture;
- bioenergy & agriculture.

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 your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Refer to the Orange Book 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.

Specifically, you are required to:

- Complete all work independently unless the instructor provides explicit permission for you to collaborate on course assignments, quizzes & exams;
- Know the definition of plagiarism (see the UF library's guide on plagiarism);
- Use your own words in all your work (e.g., never cut and paste information from another source into an assignment or quiz or exam); and
- Report any condition that facilitates academic misconduct to appropriate personnel.

Course Assessments

- <u>Exams</u> consist of short answers, matching, multiple choice, and true/false questions. Study guides are provided. Exams are proctored through Honorlock.
- <u>Assignments</u> may involve finding information online, learning to use an online tool, or covering materials related to class lectures and assigned readings.
- Quizzes. Quizzes are less than 20 questions each (matching, multiple choice/answer, and true/false) to help you prepare for Exams.

Grading and Late Policy

Grading & Grading Scheme	Assignments are weight group:	ed by	Letter Grade A	Range	to 90%
	Group	Weight	B+	< 90%	to 88%
	Quizzes	15%	В	< 88%	to 78%
	Reflection	10%	C	< 78%	to 74%
	Assignments	25%	D	< 74%	to 70%
	Exams	50%	F	< 70%	to 0%
	Student-Instructor Communication Tools	0%	'	1,0,0	
	Total	100%			
Assignments: 5 assignments	Assignments (e.g. HW) are associated with each module and are open for a minimum of two weeks. Start on them as soon as they open in Canvas.				
Quizzes: 12 quizzes	Each module has a quiz to help you prepare for the exam. Quizzes are taken once, and questions missed are visible. Quiz answers are not released.				
Reflection: 4 share peer reviews	Before each exam, you will reflect on the material you have learned, and the quiz questions you have missed. Your reflection is uploaded to Canvas and read by your peers. This is similar to an in-person "think, pair, share" activity.				
Exams: 4 exams	Exams are timed and can be started within a 3-day time frame. Exams are proctored using Honorlock. A comprehensive exam is required during final's week.				

- ✓ For information on current UF policies for assigning grade points, see https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/
- ✓ Requirements for class attendance, make-up exams, assignments and other work are consistent with UF policies: https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/.

Topic Schedule – Deadlines and Due Dates

✓ Topics and dates may change. You will be notified through Canvas regarding any changes.

Exam	Mod	Week of	• Topic	Due Th	Due F
none	Мо	Aug-23	Read syllabus		
I	M1	Aug-26	Global and Florida AgEnvironmental quality	Syllabus Quiz	Quiz M1.
	M2	Sep-o3	Watersheds & water qualityAgriculture, pollution, eutrophication		Quiz M2
	Мз	Sep-09	Watershed approach to water qualityCWA: BMPs & TMDLs	HW1 Share1	Quiz M ₃
	M1-3	Sep-16*	• Exam Review & Exam Due		Exam I
Ш	M4	Sep-16*	Soil formation & soil typeSoil quality		•
	M5	Sep-23	Soil texture, WHC, & CECSoil orders	Quiz M4	Quiz M5
	M6	Sep-30	Soil organic matter & soil qualityDecomposition & composting	HW2 Share2	Quiz M6
	M4-6	Oct-07*	• Exam Review & Exam Due		Exam II
III	M7	Oct-07*	Nitrogen cyclePhosphorus cycle		
	M8	Oct-14	Nutrient management Irrigation management	Quiz M7	Quiz M8
	M 9	Oct-21	 Beneficial use of manure in Ag Waste management & Ag Share3 		Quiz M9
	M7-9	Oct-28*	• Exam Review & Exam Due		Exam III
IV	M10	Oct-28*	Bioenergy and agricultureAnaerobic digestion & fermentation	•	•
	M11	Nov-04 Nov-12	Pests & pesticidesIntegrated pest management	HW4	Quiz M10 Quiz M11
	M12	Nov-18	 Constructed wetlands for agriculture BMPs for soil conservation 	Share4	Quiz M12
		Nov-25	University Holiday		
		Dec-02	Reading Week	*HW5 due Wed	
	M1-12	Dec-09	• Cumulative Final (Finals Week)	Final	

Online Course Evaluation Process

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/public-results/.

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.

Publishing class lectures

Students are allowed to record video or audio of class lectures. Students may not publish recorded lectures without the written consent of the instructor. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session. Publication without permission of the instructor is prohibited.

To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third-party note/tutoring services.

Additional Resources

Health and Wellbeing

- Services for Students with Disabilities: Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. Click here to get started with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.
- U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit U Matter, We Care website to refer or report a concern and a team member will reach out to the student in distress.
- Counseling and Wellness Center: Visit the Counseling and Wellness Center website or call 352-392-1575 for information on crisis services as well as non-crisis services.
- Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the Student Health Care Center website.
- University Police Department: Visit UF Police Department website or call 352-392-1111 (or 9-1-1 for emergencies).
- UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; Visit the UF Health Emergency Room and Trauma Center website.
- GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing and academic success, visit the GatorWell website or call 352-273-4450.

Academic Resources:

- E-learning technical support: 24 hours a day, 7 days a week. Contact the UF Computing Help Desk at 352-392-4357 or via e-mail at helpdesk@ufl.edu. Visit the helpdesk website.
- Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.
- Library Support: Various ways to receive assistance with the libraries or finding resources.
- Teaching Center: Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.
- Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.
- Student Complaints On-Campus: Visit the Student Honor Code and Student Conduct Code webpage for more information. On-Line Students Complaints: View the Distance Learning Student Complaint Process.