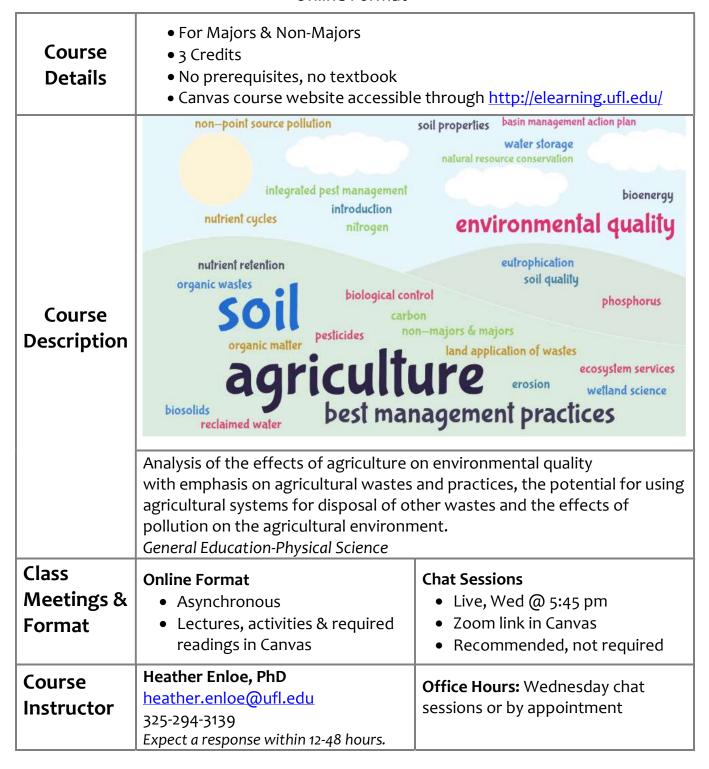
UF | Soil and Water Sciences Dept.

ALS 3133 Agriculture & Environmental Quality

Online Format



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
- Select best management practices suitable for Florida agriculture
- Assess the environmental benefits and problems associated with biofuels
- Compare aerobic and anaerobic composting techniques
- Critique the use of biosolids and reclaimed water in agricultural and residential settings
- 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. <u>Illness Policy</u>. Use email or phone to reach me for highly sensitive situations that are out of your control and may impact attendance over several weeks. I want to help, so please contact me as soon as possible. You should 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.
- E. <u>Email & phone correspondence</u> is for (1) setting a meeting time for office hours, (2) emergency situations or (3) highly sensitive situations.
- F. <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). Please note that if you have unfairly missed a question on the quiz, I will take this into consideration when calculating the final grade for the course.

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.

This course is offered through the soil and water sciences department. As such, this course emphasizes the role of soil and nutrient cycling in best management practices and sustainable management of agricultural lands. Assignments, quizzes, and in-class discussions will provide a basis for critical evaluation of historical and current agricultural issues. Students will gain an understanding of the importance of well managed agriculture and provide a foundation upon which they can formulate and articulate views relative to the role of soil in best management practices.

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. 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 and pests;
- constructed wetlands & agriculture;
- the wastewater treatment process and the use of biosolids and reclaimed water in agriculture land; and
- bioenergy.

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 <u>Orange Book</u> 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 and review sessions will be provided prior to each exam. Exam 4 is held during finals week, and it primarily focuses on materials covered since Exam 3. Exams are offered through Proctor U.
- <u>Assignments</u> may involve finding information online, learning to use an online tool, or cover materials related to class lectures and assigned readings.
- Quizzes. Quizzes consist of 5-10 questions (matching, multiple choice/answer, and true/false) to help you prepare for Exams.

Grading and Late Policy

Grading & Grading Scale:	Exams Quizzes Assignments TOTAL	50% 25% 25% 100%	A B+ B	100-90.0 % <90.0-87.0 <87.0-84.0% <84.0-80.0%	C D E	<80.0-70.0 % <70.0-65.0 % <65 %
Assignments: 6 assignments	Grades are based on six (6) assignments. Assignments are open for two weeks. Start on them as soon as they open in Canvas. Late assignments may be accepted up to a week after the due date with a penalty.					
Quizzes: 10 quizzes	Grades are based on the best 10 quizzes out of 13. Each module has a quiz to help you prepare for the exam. Quizzes are taken only once, and answers are released right before the exam. No late quizzes are accepted.					
Exams: 4 exams	Grades are based on 4 exams (Exam 1 to 4). If you miss an exam or do poorly on an exam, you have the option of taking a comprehensive, make-up exam during final's week. No additional makeup exams are given without prior consent.					

- ✓ 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.

Module	Start	Topic	Assessment	
Мо	Jan-5	Read the syllabus and take quiz to open Module 1	• Syllabus Quiz	
M1 Jan-5	lan =	Introduction to global and Florida Ag	• Quiz 1	
	Jan-5	Environmental quality & the triple bottom line	 Assignment M1 	
M2 Jan-10	lan 40	Watersheds & water quality	• Quiz 2	
	Jan-10	 Ag, non-point source pollution & eutrophication 		
M3 Jan-18		 Watershed approach to water quality 	• Ouiz a	
	Jan-18	BMPs & TMDLs	• Quiz 3	
		• Exam 1 review	 Assignment M₃ 	
M4 Ja	lan a 4	Soil formation & soil type	• Exam 1 (M1-3)	
	Jan-24	• Soil quality	• Quiz 4	
M5 J	lan 34	Soil texture, water holding capacity, & CEC	• Ouiz c	
	Jan-31	• Soil orders	• Quiz 5	
M6 Feb-7		Soil organic matter properties & soil quality		
	Feb-7	 Decomposition & composting 	• Quiz 6	
		• Exam 2 review		
M7 Feb-14	Nitrogen & phosphorus cycles	• Exam 2 (M4-6)		
	reb-14		• Quiz 7	
M8 Feb-21	Fob. 21	Nutrient management	• Quiz 8	
	160-21	 Irrigation management 	 Assignment M8 	
Mo Foba	Feb-28	 Beneficial use of manure in Ag 	• Quiz 9	
М9	reb-20	 Waste management & Ag 		
		Spring Break		
M10 M	Mar-14	• Beneficial use of biosolids & reclaimed water in Ag		
		 Challenges of land application of organic wastes 	• Quiz 10	
		• Exam 3 review		
M11 Mai	Mar-21	Bioenergy and agriculture	• Exam 3 (M7-10)	
	IVIAI-21	 Anaerobic digestion & fermentation 	• Quiz 11	
M12 Mar-	Mar 38	Pests & pesticides	• Quiz 12	
	IVIAI-20	 Integrated pest management 	Assignment 4	
M13 /	Apr 4	Wetlands & Ag	• Quiz 13	
	Apr-4	 Best management practices for soil conservation 	Assignment 5	
M14	Apr-11	• Wrap-up	Assignment 6	
M15	Apr-18	• Review	• None	
M16	Apr-25	• Final's week	Exam 4 (M11-13)Optional make-up	
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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: 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.