

## Course Syllabus

SWS 4207/5208: Sustainable Agriculture and Urban Land Management, Fall Semester [3 cr. hours]

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<b>Instructor:</b>	Dr. Samuel Smidt
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<b>Office Phone:</b>	352-294-3120
<b>Office Location:</b>	McCarty A, G153
<b>Office Hours:</b>	Scheduled by appointment
<b>Course Format:</b>	Online only
<b>Course Website:</b>	<a href="https://elearning.ufl.edu/">https://elearning.ufl.edu/</a>
<b>Course Description:</b>	Protecting the state's water from nutrient contamination depends on adopting best management practices (BMPs) for land, water, and nutrient management in the urban and agricultural settings. BMPs must be based on science and be practical and economical to adopt, while meeting society's needs. This course will cover the agricultural and urban water quality issues in Florida, their bases, water, land, and nutrient management strategies, and the science and policy behind the BMPs. We will focus on plant and crop systems but also will touch on animal systems. The first part of the course will focus on agricultural systems and the latter part of the course will focus on urban systems. Students will learn to evaluate BMP research and analyze its role in determining practices and policies that protect water quality. We will see how the "triple bottom line" (environment, society, and economics) factors interact in our decision-making process about BMPs.
<b>Required Texts:</b>	No textbook is required. You will be asked to download articles, book chapters, reports, and assignments throughout the semester.
<b>Chat Sessions:</b>	No chat sessions are required.
<b>Communication:</b>	Direct communication will come through your official University of Florida email. Group communication will be posted through the Canvas site. Each student is responsible for these messages, and emails should be checked daily. I will respond to all emails in a timely manner during the week.
<b>Canvas:</b>	I will post all grades, lecture content, and resources to the course site.
<b>Grading Policy:</b>	Your final is a combination of module assignments, quizzes, discussion posts, and course conduct. I do not curve grades. I reserve the right to adjust grades at the end of the semester at the benefit to the student. I will not adjust grades lower than earned on graded items, unless first discussed with the student.
<b>Late Homework:</b>	I do not accept late assignments without prior consent. I do not offer make-up assignments without prior consent.
<b>General Policies:</b>	Assignments are to be your own work unless stated otherwise. Each module will last ~2 weeks. All relevant content will be made available to you at the start of each module. Quizzes can only be taken once per module. Prepare accordingly. Quizzes are open resource. You must get my approval prior to any late submissions.

**Course Evaluation:** 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. These evaluations are conducted online at <https://evaluations.ufl.edu>. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results>

### Course Structure

This course is divided into 7 modules, each following the scientific method: (1) Introduction, (2) Methods, (3) Results, (4) Discussion, and (5) Conclusion. All relevant material will be provided, and grading rubrics will be developed for each graded item. Discussion board activity will require activity by critical dates, otherwise all module activity is due by the end of the module. Assignments will vary based on undergraduate or graduate student status. Level-specific tasks will be identified in the module.

### Course Grades

<b>Module Assignment:</b>	90 (125) points each, 7 assignments	630 (875) Points
<b>Module Quizzes:</b>	25 points each, 7 exams	175 points
<b>Discussion Posts:</b>	20 points per module, 7 modules	140 Points
<b>Course Conduct:</b>	55 points total	55 Points
<b>TOTAL (Graduate)</b>		<b>1,000 (1,245) Points</b>

### Grade Description

<b>Module Assignment:</b>	Each module will have an extended assignment relevant to the topics covered within the module. Each assignment will be announced at the start of the module and due at the end. Each assignment has its own grading criteria that will be described at the beginning of each module. All assignment information can be found in the module script.
<b>Module Quizzes:</b>	Each module will have one multiple choice quiz. Quizzes are timed, open-resource, and can only be taken once per module. A study guide will be provided in the module script.
<b>Discussion Posts:</b>	You will be required to facilitate and respond to discussion threads throughout each module. The quality of each post will be evaluated. Grading criteria will be provided at the beginning of each module.
<b>Course Conduct:</b>	Your overall enthusiasm, participation, activity, and communication will be evaluated and factored into your final grade for each module.
<b>Final Exam:</b>	There is no final exam.

### Grading Scale

A : 93 – 100%	B+ : 88 – 89.9%	C+ : 78 – 79.9%	D+ : 68 – 69.9%	F : <60%
A- : 90 – 92.9%	B: 83 – 87.9%	C: 73 – 77.9%	D: 63 – 67.9%	
	B- : 80 – 82.9%	C- : 70 – 72.9%	D- : 60 – 62.9%	

### Teaching Philosophy and Course Design

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1. This course follows a predictable 3-part pattern which repeats at the task, module, and semester scales. This is a “fractal” pattern to education. Part 1 is the introduction of new topics, concepts, or ideas. Part 2 is the expansion of these concepts in connection with other principles and topics. Part 3 is the application of new knowledge in a multidisciplinary framework.
2. This course is designed to satisfy a list of major unit objectives or “big-picture” concepts. Each unit objective consists of minor objectives that are supported by module. Objectives are to be used as a guide for key course concepts.

*Example:*

*Major Objective 1:* Explain systems science, define the components to an urban ecosystem, and identify key functions of urban infrastructure from a soil and water perspective.

*Minor Objective 1.1:* Define a system and explain systems science in the context of urban soil and water resources.

*Minor Objective 1.2:* Describe the components to an ecosystem and explain how humans are reliant on a well-functioning ecosystem.

**Academic Integrity:** 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.*”

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:

<https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>.

**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

**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.

**Attendance Policy:** Requirements for class attendance (online participation) are consistent with university policies that can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

**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](http://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/](http://www.umatter.ufl.edu/)

\*Career Connections Center, First Floor JWRU, 392-1601,  
<https://career.ufl.edu/>.

**Student Complaints:**

Residential Course: <https://sccr.dso.ufl.edu/>

Online Course: <http://www.distance.ufl.edu/student-complaint-process>

### Course Schedule

WEEK #	START	TOPIC	END
1-3	20- Aug	<b>Module 1: Overview of Sustainable Management</b> Resource Consumption Triple Bottom Line Policy Implications Sustainability Frameworks	8- Sep
4-5	9- Sep	<b>Module 2: Best Management Practices</b> Mass Budgets Resource Efficiency Soil Management Water Management	22- Sep
6-7	23- Sep	<b>Module 3: Agricultural Water Use</b> Florida Agricultural Water Use U.S. Agricultural Water Use Irrigation Management Virtual Water	7- Oct
8-9	8- Oct	<b>Module 4: Agricultural Land Use</b> Florida Agricultural Land Use U.S. Agricultural Land Use Cropland vs. Rangeland Soil Conservation	21- Oct
10-11	22- Oct	<b>Module 5: Urban Water Use</b> Florida Urban Water Use U.S. Urban Water Use Urban Stormwater Urban Water Quality Reclaimed Water	4- Nov
12-13	5- Nov	<b>Module 6: Urban Land Use</b> Florida Urban Land Use U.S. Urban Land Use Urban Soils Urban Farming Urban Nutrients	19- Nov
14-15	20- Nov	<b>Module 7: Future of Sustainable Management</b> Future Challenges Innovative Ideas Science Communication	4- Dec