

Course Syllabus

SWS 4204/6209: Urban Soil and Water Systems, Spring 2019

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Office Hours: Scheduled by appointment or during Chat Sessions

Course Format: Online only

Course Website: https://elearning.ufl.edu/

Course Description: This course introduces students to the topics and issues related to soil and

water quality in urban systems. This is a combination of synchronous and asynchronous lectures, activities, assignments, and online discussions through which students will learn and discuss consequences and opportunities of population growth on soil and water systems in urban areas. Graduate students will follow alternative assignments to receive graduate level credits

for this class.

Required Texts: No textbook is required.

You will be asked to download articles, book chapters, reports, and

assignments throughout the semester.

Chat Sessions: Mondays: 8-9pm

Chat sessions will serve as a virtual office hours. You can post questions beforehand or chat with me directly during the scheduled time. All questions

and answers will be documented and shared.

Communication: 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.

Canvas: I will post all grades, lecture content, and resources to the course site.

Grading Policy: Your final is a combination of module assignments, exams, discussion posts,

and course conduct. There is one extra credit assignment per module. 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.

Late Homework: I do not accept late assignments without prior consent. I do not offer make-up

assignments without prior consent.

General Policies: Assignments are to be your own work unless stated otherwise.

Each module will last ~3 weeks.

All relevant content will be made available to you at the start of each module.

Exams can only be taken once per module. Prepare accordingly.

You must get my approval prior to any late submissions.

This course is designed on respect. Respect for you, me, and each other.

Disrespectful actions will be resolved as necessary.



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 5 modules that follow the scientific method: (1) Introduction, (2) Methods, (3) Results, (4) Discussion, and (5) Conclusion. Each module has 4 components: (1) a module script, (2) module assignment, (3) module exam, and (4) discussion thread. The module script will serve as the primary guide to the module. Within each script will also be short recorded videos (referred to as TidBit lectures), links to any relevant site or reading, assignment directions, and exam study guides. Students will follow each script in entirety to complete the module to satisfaction. Assignments will vary based on undergraduate or graduate student status. Level-specific tasks will be identified in the module script.

Course Grades

Module Assignment:	100 points each, 5 assignments, 50% of your total grade	500 Points
Module Exam:	75 points each, 5 exams, 37.5% of your total grade	375 points
Discussion Posts:	15 points per module, 5 modules, 7.5% of your total grade	75 Points
Course Conduct:	10 points per module, 5 modules, 5% of your total grade	50 Points
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TOTAL 1,000 Points

Grade Description

Module	Each module will have an extended assignment relevant to the topics covered
Assignment:	within the module. Each assignment will be announced at the start of the

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.

Module Exam: Each module will have one multiple choice exam. Exams are timed, open-

book, and can only be taken once per module. Study guides will be provided

in the module script.

Discussion Posts: 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 and can be found in

the module script.

Course Conduct: Your overall enthusiasm, participation, activity, and communication will be

evaluated and factored into your final grade for each module.

Final Exam: 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

- 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 Explain how water distribution is a key underlying component to global challenges.

Minor Objective Identify how the distribution of water has led to

1.1: population distribution across the globe.

Minor Objective Identify how the distribution of water has led to 1.2: environmental injustice, population challenges, and

health issues.

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.

Requirements for class attendance (online participation) are consistent with **Attendance Policy:**

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

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 Complaints:

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

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



Course Schedule

WEEK #	START DATE	TOPIC	END DATE
1-3	7- Jan	Module 1: Introduction (Urban Systems)	25- Jan
		Introduction to Systems-Science	
		Introduction to Urban Ecosystems	
		Introduction to Ecosystem Services	
		History of Urban Infrastructure	
4-6	28- Jan	Module 2: Methods (Urban Soils)	15- Feb
		Characteristics of Urban Soils	
		Urban Contaminants	
		Urban Biogeochemistry	
		Urban Agriculture	
7-9	18- Feb	Module 3: Results (Urban Water)	15- Mar
		Water Impacts of Urbanization	
		Urbanization Impacts on Water	
		Urban Wastewater	
		Components of Urban Water	
		Systems	
10-12	18- Mar	Module 4: Discussion (Urban Resiliency)	5- Apr
		Green Infrastructure	
		Climate Change Adaptation	
		Regulatory Tools	
		Urban Planning	
		Urban Ecosystem Health	
13-15	8- Apr	Module 5: Conclusion (Urban Challenges)	24- Apr
		Water Availability	
		Food Demand	
		Infrastructure	
		Climate Change	
		Population Density	