University of Florida
Soil and Water Science Department

SWS 6209: Urban Soil and Water Systems
Course Syllabus
(This course is also co-taught at the undergraduate level SWS 4204)

General Information

<table>
<thead>
<tr>
<th>Credit/Contact</th>
<th>3</th>
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Teaching Format
Canvas elearning:
https://ufl.instructure.com/courses/324952
Pre-recorded lectures
Reading materials
Lecture slides
Multi-media materials
Live chat sessions
  • Adobe Connect - http://mbreeze.ifas.ufl.edu/usws-toor/
  • Schedule - Mondays, 8-9 PM

Term
Spring, 2017

Instructors
Dr. Gurpal Toor
(813) 633-4152
(813) 634-0001 fax
gstoor@ufl.edu

Office Hours
Monday- Friday: 3:00 pm – 6:00 pm.

Pre-Requisites:
Basic knowledge of Windows/Mac operating system; web browsing; Power Point; robust/high-speed Internet connection.

Course Description:
This course introduces students to the issues and opportunities related to soil and water quality in urban systems. This is a combination of synchronous and asynchronous lectures and chats, quizzes, assignments, and online discussions through which students will learn and discuss consequences of population growth on soil and water systems in urban areas. Graduate students must complete a special project and present via online to receive graduate level credits for this class.

Course Core Objectives:
1. Understand the consequences of population growth and urbanization.
2. Learn about the urban and anthropogenic impacts on soil and water systems.
3. Understand the various issues related to urban contaminants (toxic metals, organic compounds).
4. Learn about the urban agriculture and the opportunities and challenges in growing food in urban areas.
5. Understand the problems caused by urban wastewater and urban stormwater on water quality in urban systems.
6. Learn about the behavior of nutrients (nitrogen, phosphorus) in urban soil and waters.
7. Understand the various green infrastructure and new tools available to manage urban stormwater runoff pollutants and protect soil and water quality in urban areas.

Textbook:
No formal textbook. All the reading materials (book chapters, journal articles) will be made available each week through the course management system.

Course Format:
The content of this course is taught exclusively online. There will be NO on campus instruction for this course. Students are expected to view all appropriate recorded lectures, read any supplemental readings, and
complete weekly quiz PRIOR to the weekly chat session on Monday evenings from 8:30 to 10:00 pm. The chat session will be an interactive review of the week’s lectures and readings with instructors leading discussion of topics. All content is provided for students on the course website and chats will be administered via Adobe Connect ®.

**Grading Point Evaluation/Scale:**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>SWS6209</th>
<th>Description</th>
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<tbody>
<tr>
<td>Quizzes</td>
<td>20%</td>
<td>Weekly quiz consisting of 10 multiple-choice questions (True/False, Fill-in the blanks, match-a-pair).</td>
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<tr>
<td>Chat/Discussion</td>
<td>10%</td>
<td>Attend and participate in weekly chat sessions (5%). Contribute to discussion in course management system (5%).</td>
</tr>
<tr>
<td>Class Project*</td>
<td>20%</td>
<td>Students will undertake a small project of their interest that will cover soil and water issues in urban areas. Students will write a short report (10%) and make a formal class presentation online (10%).</td>
</tr>
<tr>
<td>Midterm exam</td>
<td>20%</td>
<td>Material from lectures, readings, chats, and discussions.</td>
</tr>
<tr>
<td>Final exam</td>
<td>30%</td>
<td>Material from lectures, readings, chats, and discussions.</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
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</table>

*The distinct difference between the undergraduate (SWS4204) and this graduate course is the requirement of class project. This includes submitting a short research paper (10 pages; Times Roman, 12 point, double spaced, 1 inch margins on all sides) on a subject relevant to individual students interests as well as the course content (to be determined with instructor). During the last scheduled chat session (April 11, 2016), graduate students will present a brief presentation (powerpoint) on their respective research projects.

**Grading Scale:**

- **A** 95%-100%
- **A-** 90%-94.9%
- **B+** 85%-89.9%
- **B** 80%-84.9%
- **C+** 75%-79.9%
- **C** 70%-74.9%
- **D+** 65%-69.9%
- **D** 60%-64.9%
- **E** <60%

For information on current UF policies for assigning grade points, see [https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx](https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx)

**Attendance, Late Assignments, and Make-up Exam Policy:**
Weekly chat attendance via the Adobe Chat forum is required. Attendance is based on the student’s confirmation of completion of weekly materials and submission of weekly assignment. Any attendance issues must be arranged with your instructor at least one business day prior to absence.

Late quizzes are accepted only with a valid reason. Quizzes submitted after the due date and time (Mondays, 6 PM) will not be graded and a 0 grade assessed for that assignment. Make-up exam may be given in extreme circumstances, as determined on a case by case basis by instructor.

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/ugrad/current/regulations/info/attendance.aspx](https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx)

**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 assumed that you will 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.

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/cwc/
  Counseling Services
  Groups and Workshops
  Outreach and Consultation
  Self-Help Library
  Training Programs
  Community Provider Database

- Career Resource Center, First Floor JWRU, 392-1601, www.crc.ufl.edu/

Each online distance learning program has a process for, and will make every attempt to resolve, student complaints within its academic and administrative departments at the program level. See http://distance.ufl.edu/student-complaints for more details.

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, www.dso.ufl.edu/drc/

Online Course Evaluation Process
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. These evaluations are conducted online at https://evaluations.ufl.edu. Evaluations are typically open for students to complete during the last two or
three weeks of the semester; students will be notified of the specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results

**Course Outline–SWS6209: Spring Semester 2017**

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Quiz Due (by 6 PM)</th>
<th>Chat schedule (Monday, 8-9 PM)</th>
<th>Lectures Release date in Canvas</th>
<th>Lecture Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Jan 4-6</td>
<td>None</td>
<td>No chat session</td>
<td>No lectures</td>
<td>Intro to course, syllabus, course expectations</td>
</tr>
<tr>
<td>Week 2</td>
<td>Jan 9-13</td>
<td>None</td>
<td>Jan 9 (3 lectures)*</td>
<td>Module 1: The Urban Millennium: Consequences of Population Growth</td>
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<tr>
<td>Week 3</td>
<td>Jan 16-20</td>
<td>Jan 16</td>
<td>Jan 16 (2 lectures)</td>
<td>Module 2: Urbanization and Urban Soils</td>
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<tr>
<td>Week 4</td>
<td>Jan 23-27</td>
<td>Jan 23</td>
<td>Jan 23 (2 lectures)</td>
<td>Module 3: Soils in the City</td>
<td></td>
</tr>
<tr>
<td>Week 5</td>
<td>Jan 30-Feb 3</td>
<td>Jan 30</td>
<td>Jan 31 (2 lectures)</td>
<td>Module 4: Urban Contaminants: Introduction</td>
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<tr>
<td>Week 6</td>
<td>Feb 6-10</td>
<td>Feb 6</td>
<td>Feb 6 (2 lectures)</td>
<td>Module 5: Urban Contaminants: Fate, Transport, &amp; Toxicity</td>
<td></td>
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<tr>
<td>Week 7</td>
<td>Feb 13-17</td>
<td>Feb 13</td>
<td>Feb 13 (2 lectures)</td>
<td>Module 6: Urban Agriculture: Opportunities &amp; Challenges</td>
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<tr>
<td>Week 8</td>
<td>Feb 20-24</td>
<td>Feb 20</td>
<td>Feb 21 (2 lectures)</td>
<td>Module 7: Urban Water Resources: Urbanization Impacts</td>
<td></td>
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<tr>
<td>Week 9</td>
<td>Feb 27-Mar 3</td>
<td>Feb 27</td>
<td>No chat session</td>
<td>Exam will be open in Canvas on March 2 (Thursday), from 9 AM to 11 PM</td>
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<tr>
<td>Week 10</td>
<td>Mar 6-10</td>
<td>-----------------</td>
<td>SPRING BREAK -----------------</td>
<td></td>
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<tr>
<td>Week 11</td>
<td>Mar 13-17</td>
<td>None</td>
<td>None</td>
<td>Module 8: Urban Wastewater: Use, Generation, &amp; Management</td>
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<tr>
<td>Week 13</td>
<td>Mar 27-31</td>
<td>Mar 27</td>
<td>Mar 27 (2 lectures)</td>
<td>Module 10: Urban Biogeochemistry</td>
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<tr>
<td>Week 14</td>
<td>Apr 3-7</td>
<td>Apr 3</td>
<td>Apr 3 (3 lectures)</td>
<td>Module 11: Green Infrastructure</td>
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<tr>
<td>Week 15</td>
<td>Apr 10-14</td>
<td>Apr 10</td>
<td>Apr 11 (~10 short presentations)</td>
<td>Give Class Presentations on Selected Class Project</td>
<td></td>
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<tr>
<td>Week 16</td>
<td>Apr 17-21</td>
<td>Apr 17</td>
<td>No chat session</td>
<td>Submit brief summaries of student presentations</td>
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*Each lecture is 20-25 minutes long. Classes for Spring 2017 semester begin on Jan 4 and end on April 19.