

Introduction to Soils in the Environment

SWS 3022 Online

Fall 2014

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Weekly Online Meeting Days/Times: TBA

Canvas Website: <http://lss.at.ufl.edu>

Course Description:

This course emphasizes soil physical, chemical, and biological properties in relation to plant growth, the environment, and the soil's place in our daily lives. The course is intended to introduce students to the importance of soils to humans and the environment through study of their morphology, physical and chemical properties, their distribution, and their biological significance. Each student who successfully completes the course should have a practical understanding of the following:

- Properties common to all or most soils on various scales.
- Vocabulary to communicate with agricultural and environmental professionals.
- Management strategies for different soils.
- Problem solving skills to manage soils effectively.
- The importance of soils in sustaining life.
- The impact of soils on environmental quality

Course Objectives:

This course satisfies the (P) designation for the physical sciences general education requirement.

Physical science courses provide instruction in the basic concepts, theories and terms of the scientific method in the context of the physical sciences. Courses focus on major scientific developments and their impacts on society, science and the environment, and the relevant processes that govern physical systems. Students will formulate empirically-testable hypotheses derived from the study of physical processes, apply logical reasoning skills through scientific criticism and argument, and apply techniques of discovery and critical thinking to evaluate outcomes of experiments.

These general education objectives will be accomplished through

1. Evaluation of how physical properties of soils influence the behavior, function, and productivity of soils in environmental and agricultural settings.
2. Analysis and computation of how water and chemicals move through soils.

3. Formulation and critical evaluation of hypotheses related to the interaction of soil solution constituents with the soil solid phase.
4. Identification of the major classes of soil organisms and how they influence the cycling of carbon and nutrients in soils.
5. Definition and synthesis of the fundamental elements of soil morphology and taxonomy to communicate important concepts related to soils in the environment.

Student Learning Outcomes

This course also will assess Student Learning Outcomes which can be defined as.

Content: Students demonstrate competence in the terminology, concepts, and methodologies used within the discipline

Communication: Students communicate knowledge, ideas, and reasoning clearly and effectively in written and oral forms appropriate to the discipline.

Critical Thinking: Students analyze information carefully and logically from multiple perspectives using discipline-specific methods, and develop reasoned solutions to problems.

The Student Learning Outcomes will be assessed through ongoing evaluation. Content will be tested using three objective exams, 8 multiple choice and True/False quizzes, and 8 written homework assignments incorporating fundamental concept knowledge and computations relevant to course material. Communication will occur through discussion during assigned meeting times, web-based discussion posts, and short answer as well as computation-based homework assignments related to soil processes. Critical thinking will be assessed through computation, analysis, and application of data/results to issues related to soil management.

Textbook:

Brady, N.C. and Weil, R.R. Elements of the Nature and Properties of Soils, 3rd Edition. New Jersey: Pearson Prentice Hall. ISBN – 13: 978-0-13-227938-3

BASIC COURSE REQUIREMENTS:

1. **Exams** (3) are open-book and consist of interpretive questions as well as objective multiple choice and true/false questions. Quizzes are designed as partial exam preparation. Further preparation will be provided by direct interaction with the instructor prior to posting of the exam and through study guides posted on the course management system (CMS). Students also are expected to synthesize course concepts to respond to short answer, short essay questions that are designed to explore student application of fundamental processes and concepts.

All exams will be conducted online using the course management system and will allow ample time for completion. Exam dates and deadlines are detailed below. Submissions will be via the “Assessments” tab in the course management system. Therefore, you are expected to complete the exams in a timely manner and not wait until the last minute. **Connectivity, hardware, or other computer-related issues**

are no excuse for lack of timely submission without proper documentation. See FAQs on the course management site or below for additional information. Exams also are timed (2 hours); submission will be prohibited if the completion deadlines are not met. Exam dates can be found in the course schedule and under the Due Dates and Deadlines Section below.

2. **Assignments** (8) will address current and historic topics of soils in the environment as well as basic calculations and analysis related to online lessons. Individual assignments will be graded based on quality of submission. Additional grading elements are explained in the assignment instructions.

3. **Discussion** (4) Peer-to-peer discussion as well as generalized discussion of course material (via the course management system under the “Discussions” tab) are detailed in the instructions for each discussion. Discussion topics will be posed as open-ended questions related to course material. **Please note that you will not be permitted to view other students’ contributions to the discussion until your first submission is posted.** Additional points may be earned based on your **thoughtful** response to posted discussion contributions from fellow students. All submissions will be posted under the “Discussions” tab on the course management system. A grading rubric is attached to each assigned discussion.

4. **Quizzes** (8) will be conducted online. Each quiz will consist of 10 questions randomly selected from a larger bank of questions. You will have 10 minutes to complete each quiz attempt. You may take the quiz 5 times during the prescribed period following completion of each related course module. A comprehensive quiz will be offered at the end of the semester. The grade on this quiz will be substituted for any missed quizzes.

5. **Participation** Students are expected, but not required, to participate in regularly scheduled online meetings. Further participation opportunities will be provided for peer-to-peer discussion as well as generalized discussion of course material (via the course management system under the “Discussions” tab as indicated above.

6. **Communication** Communication with the instructor will be via e-mail and online class meetings. Appropriate netiquette is required. E-mail communications that begin with “Hey”, “Mr. B”, or other similar salutations will be ignored. All communication also must include capitalization and punctuation, as well as reasonable grammar. **Include SWS 3022 Online** in the subject line.

4. Deadlines: Please see the Summary of Due Dates and Deadlines Section below. Each course module also is detailed with respect to requirements and deadlines, and an additional breakdown of due dates also is included. You are strongly encouraged to print both sections and keep them available for your reference.

Evaluation of Grades

Grading will be based on three examinations, written assignments, quizzes, and discussion participation. Opportunities for bonus points also will be provided throughout the semester. For information on current UF policies for assigning grade points, see

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

<u>Assignment</u>	<u>Point Value</u>	<u>Percentage of Grade</u>
Exams	500	50%
Assignments	200	20%
Quizzes	200	20%
Discussion	100	10%
TOTAL	1000	100%

Extra Credit: Several opportunities for bonus points will be provided throughout the semester.

<u>Letter Grade</u>	<u>Numerical Grade</u>	<u>GPA Points</u>
A	92-100	4.0
A-	90-91.9	3.67
B+	86-89.9	3.33
B	83-85.9	3.0
B-	79-82.9	2.67
C+	77-78.9	2.33
C	72-76.9	2.0
C-	70-71.9	1.67
D+	66-69.9	1.33
D	63-65.9	1.0
D-	59-62.9	0.67
E	<59	0

Basic Course Requirements:

ALL COURSE ACTIVITIES WILL BE CONDUCTED USING THE ONLINE COURSE MANAGEMENT SYSTEM (CMS), CANVAS AT <http://lss.at.ufl.edu>. It is advised that all students familiarize themselves with the basic functioning of the system prior to commencement of the course. **Login requires a UF account username and password.** Navigation tabs are found on the left of the screen and permit access to the various course elements. Issues regarding connectivity also are addressed. **It is imperative that all students follow the directions to establish connectivity for discussions and online class meetings.**

Hardware requirements and internet accessibility are mandatory. You will need high-speed internet access, a webcam, a microphone, and a headset. **Speakers create feedback and are not adequate** for online communications. All hardware and connectivity must be tested prior to course commencement.

GENERAL POLICIES

Lesson Format: Lessons will be delivered principally as narrated PowerPoint presentations and videos. Online meetings will seek to reinforce presented material and to provide a forum for questions and discussion.

Week 7	10/6 – 10/10 Introduction to Soil Water Chapter 5 Soil Water: Characteristics and Behavior Homework III Due Wednesday, 10-15 Discussion II Closes on 10-22
Week 8	10/13 – 10/17 Soil Water Movement and Retention Chapter 5 Soil Water: Characteristics and Behavior Quiz IV Online Due Wednesday, 10-22 Homework IV Due Wednesday, 10-22
Week 9	10/20 – 10/24 Soil Colloids: The Soil Mineral Fraction Chapter 8 The Colloidal Fraction: Seat of Soil Reactivity
Week 10	10/27 – 10/31 Reactions of the Soil Mineral Fraction Chapter 8 The Colloidal Fraction: Seat of Soil Reactivity Homework V Due Wednesday, 11-5 Quiz V Online Due Wednesday, 11-5
Week 11	11/3 – 11/7 Exam II and Preparation Exam II Review Monday, 11-3 and Wednesday, 11-5 Exam II Due Midnight on Sunday, 11-9
Week 12	11/10 – 11/14 Soil Acidity and pH Chapter 9, Soil Acidity pages 269 - 297 Homework VI Due Wednesday, 11-19 Quiz VI Online Due Wednesday, 11-19 Discussion III Closes Wednesday, 11-26
Week 13	11/17 – 11/21 Soil Organic Matter Chapter 11 Soil Organic Matter Quiz VII Online Due Wednesday, 11-26 Homework VII Due Wednesday, 11-26
Week 13	11/24 – 11/28 Saline and Sodic Soils Chapter 9, pages 301 - 316 (1 Lecture) Thanksgiving Holiday
Week 14	12/1 – 12/5 Soil Morphology and Classification Chapter 3 Soil Classification Quiz VIII Online Due Wednesday, 12-10 Homework VIII Due Wednesday, 12-10 Discussion IV Closes Wednesday, 12-10

Week 15 12/8 – 12/10 Soil Nitrogen and Phosphorus
Chapter 12 Nutrient Cycles and Soil Fertility pages 396 - 432

Exam III and Preparation

Exam III Review	Monday, 12-8 and Wednesday, 12-10
Exam III	Due midnight on Sunday 12-14

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

Outreach and Consultation

Training Programs

Groups and Workshops

Self-Help Library

Community Provider Database

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

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/

Should you have any complaints with your experience in this course please visit <http://www.distance.ufl.edu/student-complaints> to submit a complaint.”

SWS 3022 FREQUENTLY ASKED QUESTIONS (FAQ’S):

Do I really need to read this part?

Yes, because there will be a quiz. A perfect score is expected prior to accessing further course material. You will be allowed infinite attempts to achieve this score.

Please consult this FAQ section prior to submitting questions regarding course policies to the instructor.

Do I need to purchase a textbook?

Yes, the text information is given on page 2 of the Syllabus. Supplemental reading assignments will be provided as needed. Material from supplemental reading assignments is considered “fair game” on the exams.

Are there exams?

There are 3 scheduled exams. Requirements and format information is addressed above under “Exams” on page 2; Exam dates are indicated on page 8.

Do I have to make an appointment to take online Exams?

No. Exams are open note, but are timed. Ample time is permitted in which to take each exam. Further information is outlined on page 2 above.

Do I have to have any special equipment to take the online Exams?

Yes, you will need to have access to a computer with reliable internet access. Ample time is allotted for taking each exam. **Last-minute computer problems are no excuse for not completing an exam on time.**

Where do I locate class material?

You will need to complete the Syllabus/ FAQ quiz (located in the Assessments tab in the course management system. Only after completing the Syllabus/ FAQ quiz with 10 out of 10 correct points will you be able to access the Course Materials tab which includes all lectures and assignment directions. Access is described immediately below.

What should I do first; how do get started?

Navigate to <http://lss.at.ufl.edu>

Go to the class website in Sakai, then click on the “Start Here” tab on the left-side navigation panel. An overview of the course assignments and course website structure is available via the multiple links in the “Start Here” links. A copy of the syllabus, and the DUE DATES document are located in the “Start Here” tab. After you familiarize yourself with the course components, navigate to the Assessments tab > Syllabus/FAQ Quiz.

Do I really need to finish reading the rest of these FAQ’s?

Yes because there will be a quiz. You will need to complete a Syllabus FAQ quiz. As indicated above, of 10/10 is expected to pursue the rest of the course material.

How many assignments and Exams do I need to complete this semester?

Details regarding exams, assignments, quizzes, and online discussions are provided in the course syllabus, beginning on page 2.

Detailed assignment instructions for each assignment also are listed within each course module can be found under the Assignments tab. Pay close attention to the instructions within each Module as well as the posted assignments.

Print out a copy of the Due Dates document for continued reference throughout the semester. REFER TO THE DUE DATES DOCUMENT TO REMAIN ORGANIZED WITH YOUR DEADLINES THIS SEMESTER!

What happens if I miss a deadline to complete a Discussion Post or Assignment deadline?

A zero will be assigned, but in Module 8 during the last 2 weeks of class an amnesty will be in force during which you may submit any **one** missed assignment.

What happens if I miss a deadline to complete a quiz?

A zero will be assigned. Quizzes are short and relatively simple, and ample time is allotted for submission. The only excuse is a technical issue with the course management system. This must be documented as indicated under the computer-related problems heading below. Illnesses and emergencies also are addressed below. However, a comprehensive quiz will be offered during the last week of class. The grade earned will replace any missing quiz grade.

What happens if I miss an Exam Deadline?

A zero will be assigned. Ample time is allotted for submission. The only excuse is a technical issue with the course management system. This must be documented as indicated under the computer-related problems heading below. Illnesses and emergencies also are addressed below.

What if I get sick, have an important job interview scheduled, a family vacation, family reunion, emergency, or will be out of town for an athletic competition?

This is an on-line course. Being out of town is no excuse for missing a deadline.

All assignments are made available prior to the assignment deadlines. Contingency policies for missed assignments are outlined in previous FAQs and are considered to be consistent with university policies found at:

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

Excuses for illness or family emergencies must be well documented: Well documented does NOT mean a note from a family member, etc. Well documented does NOT mean a note scribbled on a prescription pad from a physician or an excuse “note” from the Student Health Center...these types of excuses do not satisfy the criteria for further consideration. Well documented means a formal letter on letterhead with supporting documentation.

What if I have a computer-related problem accessing the course material? Or what if I complete an assignment and my grade doesn't appear in the CMS? What do I do then? Do I just lose credit for that assignment?

Because this is an online class, technical issues are bound to arise, so a system has been devised to alleviate potential problems. I **do not** hold students accountable for computer-related problems; HOWEVER, (AND READ THIS PART CAREFULLY), I don't give consideration to students who wait until the very last minute to begin assignments and then develop problems. So, be sure to read the following rules:

Rule 1: If you cannot access the online course material –

- immediately contact the UF Helpdesk at (352) 392- HELP; (352) 392- 4957 and get a “Helpdesk ticket number”.

These folks are the computer technicians and technical support that can assist you with computer-related problems. I cannot assist with computer-related issues.

Rule 2: If you cannot view content in related to video lectures, any assignment, or course content and your assignment deadline is imminent:

- take a **screenshot** (print screen) of your computer screen error
- you must contact the UF Helpdesk and obtain a Helpdesk ticket number **BEFORE THE ASSIGNMENT IS DUE** (any helpdesk ticket numbers obtained after an assignment deadline will not be considered)

- you must email the instructor with descriptive problem details including relevant module and question numbers BEFORE THE ASSIGNMENT IS DUE.

How exactly, do I take a SCREENSHOT (print screen) of my computer screen? I never had to do this before...

If you're a PC user, the standard position of the Windows Print Screen Key would be at the upper right hand corner of your keyboard. It will probably appear within this sequence of keys...F9 F10 F11 F12 Print Screen Scroll Lock Pause/Break. Sometimes it appears as Print Screen | SysRq.



The sole function of this key is to take a snapshot or picture of your computer screen and copy it to the clipboard (the clipboard is an invisible holding area for content that is copied). It's the same thing as if you copied something from a document and it is now on your clipboard waiting to be pasted in its final destination.

Now, how do you get to see those Screen Captures or maybe even send them to someone? Open your favorite word processing program and create a new document. Position your cursor at the beginning of the document or wherever you want the screenshot to appear.

Using your keyboard, press Ctrl + V which will Paste the screenshot in your open document. Now you can Save (Ctrl + S) the document to wherever you wish, make sure to name it appropriately so you can easily find it. You can now send this file to anyone via email.

Source: <http://www.seoconsultants.com/windows/print-screen/>

I'm a Mac user and don't have a print screen key; what do I do to take a SCREENSHOT?

If you want to do the equivalent of Print Screen to the clipboard so that you can paste it into another app, these are the commands you'd want to use:

- * Command+Control+Shift+3: take a screenshot of the entire screen (screens if multiple monitors), and saves it to the clipboard for pasting elsewhere
- * Command+Control+Shift+4, then select an area: takes a screenshot of selection and saves it to the clipboard for pasting elsewhere
- * Command+Control+Shift+4, then space, then click a window: takes a screenshot of a window and saves it to the clipboard for pasting

Remember that the Command key on some older Mac keyboards has an Apple logo on it, but newer Mac keyboards will say 'command' on them. The command key is located next to the spacebar.

Now, how do you get to see those Screen Captures or maybe even send them to someone? Open your favorite word processing program and create a new document. Position your cursor at the beginning of the document or wherever you want the screenshot to appear.

Using your keyboard, press Ctrl + V which will Paste the screenshot in your open document. Now you can Save (Ctrl + S) the document to wherever you wish, make sure to name it appropriately so you can easily find it.

What filename should I use to save my SCREENSHOT file?

Save the document with your Last Name, First Name and Module number you are referring to as such: LastNameFirstNameMod1 (e.g. SmithJaneMod1). **Do not use any spaces when naming files in the CMS as the recipient will not be able to open the file.**

What happens if I make a mistake and use a space when naming a file that I attach in a Sakai email?

The person who receives your email will not be able to open the attachment. Therefore, don't use spaces when naming files in Sakai.

Can you tell me what hours the UF Helpdesk is available?

UF Helpdesk hours can be found at: <http://helpdesk.ufl.edu/>

Where can I locate my grades as I complete each assignment?

Assignments and Discussion Posts may take up to a week to appear in the gradebook. An email is sent to students when assignment grades are posted and released to students in the CMS.

What if my assignments don't appear even after I complete the assignment?

It is important that you VERIFY in the Discussion or Assignment tab that your submission was received by the CMS. Too often, **wireless connections are not stable and may not record your submission correctly.** After you upload any assignment, it is important to re-log in to verify that your assignment has been uploaded. Uploading your assignments using a hard-wired connection is strongly recommended. It is the students' responsibility to verify that assignments are uploaded correctly.

What if I have a dispute about an incorrectly posted grade in the Sakai grades tab?

If you have a dispute about a grade posted, you must contact the instructor within three days after the grade is posted. After that, there will be no appeal on posted grades. Please be advised that this is your responsibility to do so within the time limit.

Grades will not “magically appear” at some point before the end of the semester; Discussion Posts and assignment grades may take up to a week after the assignment date to appear but an email will be sent to students when the grades are uploaded.

I'm not very good at writing notes from lecture class, I'm really nervous that I won't be able to keep up with the lecture material. What should I do?

You can watch the presentations multiple times and most allow you to pause the presentation or see previously viewed slides. The instructor and teaching assistants will be available to assist you with questions about course content during the semester.

What about attendance since this is an online class?

Scheduled online sessions with the instructor are designed to provide an environment for inquiry and clarification of course material. Both experience and common sense dictate that there is a high correlation between instructor interaction and class performance; whether a course is in-person or online.

Waiting until the last minute to begin reading, watching the videos, or beginning the assignments will lead to poor performance in this class.

COMPUTER-RELATED ISSUES ARE NOT AN ACCEPTABLE EXCUSE FOR MISSING AN ASSIGNMENT DEADLINE!



DO NOT WAIT UNTIL THE LAST MINUTE TO BEGIN ASSIGNMENTS