

## **Syllabus SWS 5132 – Tropical Soil Management (ONLINE)**

November 17, 2020

### **Catalogue Description**

<b>Term</b>	Spring 2021 ( <b>online by zoom only</b> )
<b>Online Meetings</b>	Tuesday Period: 9:35 am -10:25 am Thursday Period: 9:35 am- 11:30 am
<b>Credits</b>	3
<b>Instructor</b>	Dr. Pedro Sanchez 2169 McCarty Hall A Phone: 646-244-1720 <a href="mailto:pedrosanchez@ufl.edu">pedrosanchez@ufl.edu</a>
<b>Office hours</b>	(online) Wednesday 2pm to 3pm by appointment

### **Course Prerequisite:**

- **SWS 3022:** Introduction to Soils in the Environment.  
or:
- **SWS 5050** Soils for the Environmental Professionals  
or
- **Equivalent course from other universities**  
or
- **permission from instructor**

### **Course Requirements:**

Students must have a UF e-mail account, high speed Internet access, and access to a computer that meets the University of Florida computer standards. **Live attendance is required by zoom with video on.**

### **Objectives:**

Provide a deep understanding of the diversity and variability of soils in the tropics, and their agronomic and ecological practical applications.

Training to develop a short policy forum Science type article to gain experience in expressing succinctly and effectively how to communicate an important issue on soils of the tropics to a wide scientific audience.

### **Course text**

Recommended: Sanchez P.A. 2019. *Properties and Management of Soils in the Tropics, Second edition*. Cambridge University Press, Cambridge, UK.  
<https://doi.org/10.1017/9781316809785> ISBN: 9781107176058 (print), 9781316809785 (e version).

All reading assignments will be available on the course website <https://elearning.ufl.edu/>

## Course Schedule

The schedule is **approximate**, pace may vary. Second period on Thursdays is for general discussion, or if no questions, will proceed with next topic.

Lecture and date	Topic	Recommended Readings Properties and Management of Soils in the Tropics 2nd Ed. (chapters in website) plus additional readings	Assignments
1. Jan 12-Tu	Course introduction Tropical Environment - Climate Change	Ch1	
2. Jan 14 -Th	Human ecology	Ch 2 The Economist: The African Century <a href="https://www.economist.com/special-report/2020/03/26/africa-is-changing-so-rapidly-it-is-becoming-hard-to-ignore">https://www.economist.com/special-report/2020/03/26/africa-is-changing-so-rapidly-it-is-becoming-hard-to-ignore</a>	
3. Jan 19- Tu	Diversity, Taxonomy, FCC	Ch 3, 4, 5	
4. Jan 21 Th			
5. Jan 26 Tu	Soil Physics, Water	Ch 6, 7	
6. Jan 20 Th			
7. Feb 2 Tu	Soil Mineralogy	Ch 8	Instructions for policy paper
8. Feb 4 Th	Soil Biology	Ch 10	Take home exam 1 handed out
9. Feb 9 Tu	Soil Acidity	Ch 9	Take home exam 1 due
10. Feb 11 Th			Consultations with instructor on developing policy paper from now on
11. Feb 16 Tu	Organic Carbon	Ch 11	
12. Feb 18 Th			
13. Feb 23 Tu			
14. Feb 25 Th	Fertility Principles	Ch 12	
15. March 2 Tu	Nitrogen	Ch 13	
15. March 4 Th			
16. March 9 Tu	Phosphorus	Ch 14	
17. March 11 Th			Take home exam 2 handed out
18. March 16 T	Soils under Slash and Burn	Ch 16	Take home exam 2 due
19. March 18TH			
20. March 23 T	Soils under wetland rice	Ch 17	
21. March 25 TH			
22 March 30 T	Soils under livestock systems	Ch 18	
23. April 1 Th			
24. April 6 T	Soils under forestry and agroforestry	Ch19	
25. April 8 TH			Policy Paper due
26. April 13 T			
27 April 15 Th	Policy papers presentations and broader discussions		
28. April 20 T	WRAP UP		

## Course Assessment and Grading

Student learning is assessed based on 2 take home exams (open book, closed mouth), a short paper organized as a Science Policy Forum article (< 1500 words, with abstract text, references and 2 tables or figures), plus class participation.

**Assignments turned in late results in a loss of 5 points per day of the maximum points unless late turn-in is caused by excused absences.**

Percent	Grade	Assignment	Percentage of Final Grade	Given	Due
95-100	A+	Take home exam 1	20	Feb 4	Feb 9
		Take home exam 2	20	March 11	March 16
		Policy paper	40	-	April 8
90-94	A	Class participation	20		
86-89	B+				
83-85	B				
80-82	B-				
77-79	C+				
74-76	C				
70-73	C-				
60-69	D				
<59	E				
		Total	100%		

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

## Attendance and Make-Up Work

**Virtual attendance for the 28 class periods is mandatory unless excused according to university policy**

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>.

## Students Requiring Accommodations

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, <https://www.dso.ufl.edu/drc>) by providing appropriate

documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

### **Course Evaluation**

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu/evals>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>.

### **University Honesty Policy**

UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students 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.” The Honor Code (<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

### **Software Use**

All faculty, staff, and students at 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. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

### **Student Privacy**

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see: <http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html>

### **Campus Resources:**

#### **Health and Wellness**

#### **U Matter, We Care:**

If you or a friend is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu) or 352 392-1575 so that a team member can reach out to the student.

**Counseling and Wellness Center:** <http://www.counseling.ufl.edu/cwc>, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

**Sexual Assault Recovery Services (SARS)**

Student Health Care Center, 392-1161.

**University Police Department** at 392-1111 (or 9-1-1 for emergencies), or

<http://www.police.ufl.edu/>.

Academic Resources

**E-learning technical support**, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. <https://lss.at.ufl.edu/help.shtml>.

**Career Resource Center**, Reitz Union, 392-1601. Career assistance and counseling.

<https://www.crc.ufl.edu/>.

**Library Support**, <http://cms.uflib.ufl.edu/ask>. Various ways to receive assistance with respect to using the libraries or finding resources.

**Teaching Center**, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring.

<https://teachingcenter.ufl.edu/>.

**Writing Studio, 302 Tigert Hall**, 846-1138. Help brainstorming, formatting, and writing papers.

<https://writing.ufl.edu/writing-studio/>.

**Student Complaints Campus:**

[https://www.dso.ufl.edu/documents/UF\\_Complaints\\_policy.pdf](https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf).