SWS3022L Introduction to Soils Lab Spring 2022 (1 credit)

<u>Course Description</u>: The course is designed to introduce the students to physical, chemical and biological aspects of soil science and provide hands on experience with conducting laboratory experiments, describing and classifying soils in the field, accessing and understanding soil survey data and interpretations and learning the basics of soil taxonomy.

Course Objectives: Following the course students should know how to conduct laboratory soil science experiments and interpret results, describe and classify soils in the field and access and utilize on-line soil survey information.

Instructor: Andrew Williams, Soil Scientist, USDA Natural Resources Conservation Service (Ret.) Phone: (850) 384-8907. Email: andrew100@cox.net

<u>Class Schedule:</u> Mondays from 5 to 8 pm (*Saturday field trips on January 29th and February 19th).

Grading:

Lab Reports/Homework	40%
Exams (2)	40%
Oral Presentations	10%
Attendance and Participation	10%

Class Schedule:

Date:	Topic:
Jan 10	Introduction, lab orientation and safety training

- Jan 17 No Lab Holiday
- Jan 24 Soil Physical Properties: Color and Texture
- Jan 29* Soil Physical Properties: Field Trip
- Jan 31 Soil Physical Properties: Particle-Size Analysis
- Feb 07 Soil Physical Properties: Bulk Density
- Feb 14 Soil Chemical Properties: pH and Redox
- Feb 19* Soil Physical and Chemical Properties: Field Trip
- Feb 21 Soil Biology
- Feb 28 Exam 1
- Mar 07 No Lab Spring Break
- Mar 14 Soil nitrogen and phosphorus cycles/management
- Mar 21 Soil Survey and Public Land Survey System
- Mar 28 Soil Survey Data and Interpretations
- Apr 04 Introduction to Soil Taxonomy
- Apr 11 Introduction to Hydric Soils
- Apr 18 Exam 2

Attendance and Make-Up Work

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.

Grading:

Letter Grade	Numeric Value
A	93-100
A-	90-92
в+	87-89
В	83-86
B⁻	80-82
C ⁺	77-79
С	73-76
C_	70-72
D	60-69
E	<60

CODE OF CONDUCT

All students are expected to abide by the Student Honor Code as described in the Student Handbook (<u>http://www.dso.ufl.edu/studentguide/studenthonorcode.php</u>). Students are expected to behave in a professional and courteous manner towards instructor, other classmates, and guest speakers. Professional behavior includes: arriving to class at, or preferably before, the start of the class period, providing your **full** attention to the instructor and classmates, being respectful of a diversity of opinions, avoiding disruptions that prohibits your classmates from learning. Inappropriate behavior will lead to immediate dismissal from the class period and possible expulsion from the course.

In addition, plagiarism is taken very seriously at this institution, and can result in a reduced grade, failure of the course, and possible dismissal from the college. Plagiarism includes: 1) the direct use of any written material (**including internet sites**!!) without proper quotations and citation or 2) the submission of a document, in part or wholly authored by someone other than the student. Please note that we have specific software to determine if your work is plagiarized. It is up to the professor to evaluate the severity of any infraction and to determine the disciplinary action to be taken. The student should also be aware of his/her legal rights as defined in the Student Honor Code.

UNIVERSITY SERVICES

You have full access to all the student services available through the University of Florida, including:

<u>Disability Resource Center</u> : 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

University Counseling Center, <u>http://www.counsel.ufl.edu/</u>,310 Peabody Hall, 352-392-1575, personal and career counseling

Student Mental Health, Student Health Care Center, <u>http://shcc.ufl.edu/smhs/</u>,352-392-1171, personal counseling

Sexual Assault Recovery Services, Student Health Care Center, <u>http://shcc.ufl.edu/care/</u>,352-392-1161, assault recovery counseling

Career Resource Center, <u>http://www.crc.ufl.edu/</u>, Reitz Union, 352-392-1601, career development assistance and counseling