

# 202410-SWS-2102C-15295: Soils and Fertilizers

## Valencia College West

**Instructor:** Ayesha Mirza

**Office Location:** Building 1, Room 228

**Email:** [amirza9@valenciacollege.edu](mailto:amirza9@valenciacollege.edu) or through Canvas email

**Modality:** Mixed mode

### **Class Days, Times, and Location:**

- Lecture Virtual (canvas)
- Activity/Laboratory: Friday: 4:00p.m. – 6:00 p.m. (on campus) Building 1 Room 228
- Conference Days: Monday -Wednesday via Zoom 3 p.m.- 5p.m.  
Friday (on campus) 3:00 p.m. – 4:00 p.m. Other times are available upon request.

**Credit Hours:** 3

**Prerequisites:** PLS1010C

Welcome to the course! This syllabus is an agreement between the student and the instructor. By enrolling in and then attending this course, the student agrees to and accepts the terms and conditions of this course. It is the responsibility of the student to read this syllabus carefully in its entirety and to adhere to all policies and procedures within the syllabus.

## COURSE INFORMATION

### Course Description

This course involves the study of soil-water-plant relationships. The emphasis is on soil properties (soil science), soil management and soil use (economical as well as social). It includes nursery and greenhouse soils for Florida, elemental nutrient studies and selected research topics.

### Course Outcomes

By the end of the course, you will be able to:

1. Explain principles of soil formation and classification.
2. Determine soil physical, chemical, and biological properties.
3. Describe how to utilize the principles of soil and water conservation.
4. Interpret soil analysis.
5. Describe how to determine the need for fertilizer application.

### Textbooks (optional)

- *Soil Science & Management*. 6<sup>th</sup> ed. Edward J. Plaster. 2014. Delmar, Cengage Learning.

### Valencia College Core Competencies

Valencia's Student Core Competencies are complex abilities that are essential to lifelong success. This course will help you to develop and demonstrate the abilities to:

1. THINK clearly, critically, and creatively.
2. COMMUNICATE with others verbally and in written form.
3. Make reasoned VALUE judgments and responsible commitments.
4. ACT purposefully, reflectively, and responsibly.

Due to the nature of these global competencies, many of the problems will be presented in the context of an application. These applications will require students to select appropriate information from the problem and communicate effectively in order to explain and/or describe how the student used the skills they are learning to arrive at an appropriate solution for the problem.

## EXPECTATIONS

### Our inclusive Learning Environment

Your success in this class is important to me. We all learn differently and bring different strengths and needs to the class. We expect everyone in this class to contribute to a respectful, welcoming, and inclusive environment to support the learning of all other members of the class. We practice the 13 principles for "how we treat each other." If there are aspects of the instruction or design of this course that result in barriers to your inclusion or accurate assessment or achievement, please let me know as soon as possible.

If you require accommodations, please let me know during the first two weeks of the semester. You will need to register with the Office for Students with Disabilities (OSD) (West Campus SSB 102, 407-582-1523). OSD determines accommodations based on appropriate documentation of disabilities and provides a letter to me with them.

### Teacher Expectations

I believe every individual has the potential to succeed and a skill in their pocket and the capacity to learn. Success in this class is for all if the right learning environment and strategies are used. This course is designed to provide learning for all and includes a variety of learning assessments with diverse learners in mind. I value your uniqueness and experience and want you to value your classmates as well. We are all learning together so please reach out to me if you have any questions or need extra assistance. I will follow the course outline as closely as possible and will notify you of modifications in the outline if they happen.

- I will attempt to create and maintain a classroom atmosphere in which you feel free to both listen to others and express your views and ask questions to increase your learning. I like to see the class as a community.
- Please talk with me before or after class or make an appointment to see me if there is anything you want to discuss or about which you are unclear. I am also available to do zoom conferences for your convenience and want to be supportive of your learning and growth.
- I will provide feedback/grades within a **week (7 days)** on the submitted assignment. It will be posted to the Canvas Gradebook.

### Student Expectations

Set goals for yourself for this course and plan/work to meet them. Meet all course deadlines and you will receive feedback within a week on the submitted assignment. Value your classmate's opinions and be open to learn new ways of thinking. Complete all assignments, quizzes, and exams without sharing/copying other's work or answers and be proud of your work.

- Please inform me through canvas or by e-mail if you will miss class and why and get notes and other class information from a fellow student. I recommend exchanging phone numbers with your classmates.
- You are expected to view videos before they are discussed in class, completing assignments thoroughly and on time, and contribute to class discussions.

- You are expected to check your Atlas email and Canvas inbox on a regular basis throughout the week.
- Since this is a mixed-mode class, some of it is spent at the comfort of a computer, you can expect to devote **3-6 hours** each week (outside of class) to this course.
- Feel free to share feedback regarding how well the class is meeting your needs or if material is unclear. I make changes to the class based on feedback, either on the spot or in the future.
- It is also expected that you will treat classmates with respect and observe the rules of confidentiality regarding personal information shared in class.

## Assessment Method and Evaluation Scale

All assignments will be turned-in according to the schedule outlined on Canvas.

**Quizzes:** Quizzes will be based on the chapter videos and activities. Questions may include multiple-choice, matching, and true/false. Online quizzes, accessed through Canvas, will be due on following **Thursdays before noon** after the video guide and activity is due. You will have one opportunity to take the quiz. You need to download [Respondus Lockdown Browser](#) to take the **quizzes and they are timed**.

**Final Exam:** You will have a cumulative online final exam based on the information from your online quizzes. You will use **Respondus Lockdown Browser** to take the **final exam**. This exam will have 100 multiple-choice questions. A study guide is available.

**Video Guides:** Video guides include questions from the videos that will assist you in studying for the quizzes. Thanks to Dr. DeBusk I have include scripted PowerPoints with each video. It is expected that your answers for your video guides will be in your own words or paraphrasing what is provided. Do not copy and paste paragraphs or sentences from the PowerPoint script. The best way to learn is to handwrite the answers and take a photo of your video guide, although you can type your answers.

**Activities:** The activities are an integral part of the course and provide you with practical applications of the lecture material. Activities are graded for completion, but questions on the quizzes will be drawn from the activities. Most of them are done on campus and require you to have access to a laptop.

**Project:** You will choose a crop or cropping system and create a soil sustainability factsheet based on material you learned in each unit. The project is graded using a detailed rubric. You will have weekly check-ins worth 2 points each where you will submit a section of your factsheet. This is an opportunity to receive feedback of each section and get clarification.

**Late Work/Makeup Policy:** Since life sometimes gets in the way, your lowest quiz grade will be dropped. There is no Late Work Policy. If there are extenuating circumstances, please contact me as early as possible to discuss your options. Incomplete assignments will receive a zero.

**Extra Credit:** Students can earn extra credit for most chapters that count up to 1 point credit on the Quizzes. These worksheets are a good review for the tests and the final exam.

## Grading Scale

A = 89.5-100%, B = 79.5-89.49%, C = 69.5-79.49%, D = 59.5-69.49%, F = below 59.49%

- Quizzes (one will be dropped) – 30%
- Final Exam – 10%
- Video Guides – 20%
- Activities – 20%
- Project – 20%

## COURSE SCHEDULE

Week of	Online Topic(s)	All Assignments are due by <u>Thursday</u> except <b>highlighted Lab/Activities which are due on <u>Friday in Class</u></b>	Assignments Due Sunday
Aug 21- 27	Importance of Soil (Ch 1)	<b>Orientation Quiz-Tue Aug22</b> Introduction Discussion Be in the Know Assignment <b>Activity: Climate Change and Agriculture</b>	Library Workshop  Video Guide Importance of Soil
Aug 28 -Sep 3	Soil Origin (Ch. 2); Soil Classification (Ch. 3)	<b>Quiz: Importance of Soil</b> 2 Video Guides: Soil Origins and Classification Project: Crop and Description <b>Activity: Soil Classification</b>	Soil Origins and Classification Extra Credit Activity  Project: Soil Origins and Classification
Sep 4 -10	Physical Properties (Ch. 4)	Quiz: Soil Origins and Classification Video Guide: Physical Properties of Soil <b>Activity: Physical Properties</b>	Physical Properties Extra Credit Activity  Project: Physical Properties
Sep 11 -17	Soil Conservation (Ch. 18)	<b>Quiz: Physical Properties</b> Video Guide: Soil Conservation <b>Activity: Erosion and Climate Change</b>	Soil Conservation Extra Credit Activity  Project: Effect of Climate Change
Sep 18 -24	Soil Water (Ch. 7)	<b>Quiz: Soil Conservation</b> Video Guide: Soil Water <b>Activity: Soil Water</b>	Soil Water Extra Credit Activity  Project: Knowing When to Water
Sep 25-Oct 1	Drainage and Irrigation (Ch. 9)	<b>Quiz: Soil Water</b> Video Guide: Drainage and Irrigation <b>Activity: Drainage &amp; Irrigation</b>	Drainage and Irrigation Extra Credit Activity  Project: Irrigation
Oct 2-8	Water Conservation (Ch. 8)	<b>Quiz: Drainage and Irrigation</b> Video Guide: Water Conservation and Irrigation <b>Activity: Water Conservation and Irrigation</b>	Water Conservation and Irrigation Extra Credit Activity  Project: Water Need and Schedule
Oct 9-15	Soil Fertility (Ch. 10); Soil Sampling and Testing (Ch. 13)	<b>Quiz: Water Conservation</b> Video Guide: Soil Fertility <b>Activity: Soil Fertility and Testing</b>	Soil Fertility and Testing Extra Credit Activity  Project: Soil Sampling
Oct 16-22	Plant Nutrition (Ch. 12)	<b>Quiz: Fertility and Soil Testing</b> Video Guide: Plant Nutrition	Plant Nutrition Extra Credit Activity

		<b>Activity1: Nutrient &amp; pH lab</b> <b>Activity 2: Plant Nutrient Deficiency Case Studies</b>	Project: Nutrient Deficiencies
Oct 23-29	Soil pH and Salinity (Ch. 11)	<b>Quiz: Plant Nutrition</b> Video Guide: Soil pH & Salinity <b>Activity: Soil pH</b>	Soil pH & Salinity Extra Credit Activity  Project: Soil pH
Oct 30-Nov 5	Life in the Soil (Ch. 5)	<b>Quiz: Soil pH</b> Video Guide: Life in Soil <b>Activity: Life in the Soil</b>	Life in Soil Extra Credit Activity Project: Microorganisms
Nov 6-12	Organic Matter (Ch. 6)	<b>Quiz: Life in Soil</b> Video Guide: Organic Matter <b>Activity: Living Soil Film</b> (No face to face class on Fri)	Organic Matter Extra Credit Activity  Project: References
Nov 13-19	Fertilizers (Ch. 14)	<a href="#">Extra Credit: Student Feedback</a> <b>Quiz: Organic Matter</b> Video Guide Fertilizers <b>Activity: Analyzing Fertilizer Labels/Lab pH activity</b>	Project: Fertilizer Recommendations
Nov 22-26	<i>Thanksgiving Holiday (no class)</i>		
Nov 27- Dec 3		Fertilizer Extra Credit Activity <b>Quiz: Fertilizers</b> <b>Soil Sustainability Project</b>	
Dec 2-8		<b>Final Exam Online (Respondus)</b>	

### Vacations and other important dates

- Aug 21 – Classes begin.
- Aug 28 – Drop/Refund Deadline
- Oct 27 – Withdrawal deadline
- Nov 10- Veterans Day (work from home-no classes)
- Nov 22-24 – Thanksgiving Break (no classes)
- Dec 2 - 8 – Final exam week

## COLLEGE AND COURSE POLICIES

### No Show Policy

Class attendance is required for mixed-mode classes beginning with the first-class meeting. If you do not attend the first-class meeting, you may be withdrawn from the class as a “no show.” If you are withdrawn

as a “no show,” you will be financially responsible for the class and a final grade of “WN” will appear on your transcript for the course.”

Since part of this is an online class, attendance is counted as assignments submitted. The Orientation Quiz is the required attendance activity for the first week. You need to complete the activity to show that you are attending the course. If you are unable to complete the Orientation Quiz during the first week, notify me as early as possible and we can discuss your options. If you are not planning to continue the class, try to drop the course before the deadline.

### Attendance / Tardy Policy

The College believes that regular attendance and class participation are significant factors which promote success in college. Students are expected to attend all face-to-face sessions unless unavoidable emergencies prevent attendance. An attendance sheet will be passed around at the beginning of every class. A student will be withdrawn after 4 excused or unexcused absences. You will receive a warning email after your third absence. Email me if you are planning on being absent and your reason.

Students arriving more than five (5) minutes late will be recorded as being absent from class unless they notify the instructor of their presence in class at the end of the period.

This is a mixed modality course, managed through Canvas. You must have access to the Internet (available on all Valencia campuses) to complete the course requirements. Your online attendance will be checked based on your participation in the course and submission of coursework in timely manner.

### Withdrawal

The deadline for Drop/Refund is **Aug 28<sup>th</sup>** and for Withdrawal is **Oct 27<sup>th</sup>**. Per [Valencia policy](#) a student who withdraws from class before the established deadline for a particular term will receive a grade of “W”. A student is not permitted to withdraw after the withdrawal deadline. Students who stay in the class after this deadline are responsible to complete all work required for the course, e.g., homework, projects, exams, etc. If you choose to stop coming to the class after the Withdrawal deadline, you will be held responsible for all work missed, including the final. Any work which is not completed by the appropriate deadline will receive a zero. Hence, the final grade for the course will be determined by taking into consideration the percentages obtained by work which was turned in and the zeros given to work which was not turned in on time along with attendance.

Any student who withdraws or is withdrawn from a class during a third or subsequent attempt in the same course will be assigned a grade of “F.” If you do not intend to complete the course, you must withdraw yourself prior to the withdrawal date.

### Academic Honesty

All forms of academic dishonesty are prohibited at Valencia College. [Academic dishonesty](#) includes, but is not limited to, acts or attempted acts of plagiarism, cheating, furnishing false information, forgery, alteration or misuse of documents, misconduct during a testing situation, facilitating academic dishonesty, and misuse of identification with intent to defraud or deceive.

All work submitted by students is expected to be the result of the students' individual thoughts, research, and self-expression. Whenever a student uses ideas, wording, or organization from another source, the source shall be appropriately acknowledged. Copying and pasting from an online source even if providing a reference is still considered plagiarism. Any score on Turnitin above 15% is checked for plagiarism. You can see your score once you submit it. If a student is caught submitting plagiarized work, I will allow

a rewrite for up to 50% of the assignment score for the first offense. A second offense will result in a zero score on the assignment and a third offense will result in a class grade of F.

Refer to the [Expectations of Academic Integrity](#) Letter from the Dean for more specific expectations and the effect of academic dishonesty in your life.

## College Student Conduct Policy

Valencia is dedicated not only to the advancement of knowledge and learning but also to the development of responsible personal and social conduct. As a registered student, you assume the responsibility for conducting yourself in a manner that contributes positively to Valencia's learning community and that does not impair, interfere with, or obstruct the orderly conduct, processes, and functions of the college as described in the [Student Code of Conduct](#).

Examples of disruptive or distracting activities include, but are not limited to the following:

- Being noisy when arriving late to class or leaving early.
- Carrying on private conversations while the professor is talking.
- Disrespectful language, tone and mannerisms.
- Sleeping or attempting to sleep in class.

## Netiquette

It is important to be aware of your behavior in an online learning environment to ensure positive interactions with your instructor and peers. This requires you to follow some guidelines for behaviors.

All students are expected to:

- Show respect for the instructor and for other students in the course
- Respect the privacy of other students
- Express differences of opinion in a polite and rational way
- Maintain an environment of constructive criticism when commenting on the work of other students
- Remain focused on the learning topics during discussions and activities

## Security

We want to reassure you that our security officers are here around the clock to ensure the safety and security of the campus community. Remember that you can always call security for an escort if you feel uncomfortable walking alone on campus. White security phones can also be found in many of our buildings; simply pick up the phone and security will answer.

Finally, report any suspicious persons to West Campus Security at 407-582-1000, 407-582-1030 (after-hours number), or by using the yellow emergency call boxes located on light poles in the parking lots and along walkways.

## Third Party Software & FERPA Policy

Valencia College has a firm commitment to protecting the privacy rights of its students. Under no circumstances will your test scores, total points, or final grades be discussed on the telephone or over e-mail. FERPA rights to privacy prevent the divulging of scores or related materials by these means. Scores will only be given face-to-face with each student or by accessing your ATLAS account.



## Communication

You may contact me in various ways during this semester.

- You may contact me through the [Canvas Inbox](#). This is probably the best and quickest method of communication. I will respond to your message within 48 hours, often much sooner, with the exception of days and times when the college is closed.
- For more complicated issues (e.g., walking you through an assignment), your best option is communication through the Zoom tool in Canvas. The Zoom tool is a live, synchronous webinar platform where you can ask questions and receive support for the course. Please email me if you would like to use this method at a suitable time.
- You may email me at [amirza9@valenciacollege.edu](mailto:amirza9@valenciacollege.edu). In your messages **subject** (if not using the Canvas Inbox), please **indicate your course number** so that I may better assist you.
- If you prefer to speak to me directly, I will be happy to make an appointment with you any time on Friday between 3:00 p.m. – 3:45 p.m.

## STUDENT ASSISTANCE

### Learning Support

**Learning Support Services** provides students with academic support through distance tutoring, face to face tutoring at the campuses, writing consultations, library services, and resources. Tutoring is offered in most academic disciplines including math, science, foreign languages, English for academic purposes (EAP), computer programming and writing assistance for any course. Assistance with library research can be accessed online through Atlas or the tutoring LibGuide. **Brainfuse** is our new 24/7 online tutoring and learning hub, which is available to all of Valencia's students. This service is best used as a back-up to Valencia's Distance Tutoring service, not as a replacement. Brainfuse is accessible through Canvas. For more information on how to access tutoring and library research assistance, please visit the college-wide [Learning Support Services LibGuide](#).

**Skillshops:** [Skillshops](#) are free workshops, or mini courses that provide real-life solutions to common student issues.

**Library:** At each campus library, librarians and other qualified staff can assist students with searching and finding items and information, MLA and APA citations, and technologies. The library provides a variety of books, eBooks, online articles, textbooks, DVDs and streaming videos to support course-related research and other learning needs. View the [Library website](#) for more information, as well as the tutorials below:

- [How to Connect to the Library Online](#)
- [How to Access eBooks At Valencia Library](#)
- [How to Access Databases & Articles](#)

### Advising

The advisor for the program is Heidi Shugg. She can be reached at [hshugg1@valenciacollege.edu](mailto:hshugg1@valenciacollege.edu) or 407-582-1461. You can schedule an appointment with her. She is a good resource for questions about classes, degree programs and certificates, graduation, and transferring to a university. Don't wait until your last year – visit the [career center](#) today!



## Student Assistance Program

Valencia students can get immediate help with issues dealing with stress, anxiety, depression, adjustment difficulties, substance abuse, time management as well as relationship problems dealing with school, home or work. [BayCare Behavioral Health Student Assistance Program](#) services are free to all Valencia students and available 24 hours a day by calling (800) 878-5470. Free face-to-face counseling is also available.

## Students Requiring Academic Accommodations

Students with disabilities who qualify for academic accommodations must provide a letter from the Office for Students with Disabilities (OSD) and discuss specific needs with me, preferably during the first two weeks of the semester. The OSD (West Campus SSB 102, ext. 1523) determines accommodations based on appropriate documentation of disabilities.

## Title IX, Wellness, Reporting, and Support

Valencia College strives to be a place free from all forms of discrimination. Title IX protects students from discrimination based upon sex including protections against sexual violence, domestic violence, and stalking. This also includes protections for students who are pregnant or may become pregnant. If you experience sexual violence, domestic violence or stalking and would like assistance there are several options available to you. Valencia partners with the Victim Service Center of Central Florida which is a confidential resource available 24/7 at (407) 254-9415 and text 407-497-6701. If you would like assistance on campus, you can go to the [Equal opportunity and Title IX](#) website or contact Valencia College's Title IX and Section 504 coordinator, Ryan Kane, at by emailing rkane8@valenciacollege.edu. If you would like to report to law enforcement, you may visit Campus Security or call 911.

Please note that there are no confidential resources on campus. As your professor, I am required to report any information mentioned in this statement to the appropriate campus resources. This will include your name and detailed information shared with me. We take privacy very seriously at the College and only those who have a legitimate need to know the information will be provided with this information. If you have more questions about Title IX or the College's response, <https://valenciacollege.edu/about/equal-opportunity-title-ix/>.

If you find yourself feeling unwell and are unable to participate in the course due to illness, family emergency, etc., please communicate with me as soon as possible to create a plan for the best course of action. In the case of a prolonged absence of one week or more, you and I will meet to discuss options and determine your ability to continue in the course.

## Technology Requirements

Students should verify [computer software and hardware requirements](#) to ensure course work can be submitted successfully. Since all assignments are submitted through Canvas (unless otherwise noted), access to a computer is required for this course. Students that do not have a computer for exams can borrow a computer from the library for either 4 hours or 7 days or take the exam in a Computer Access Lab on a Valencia College campus during library hours. You will need to download Respondus Lockdown Browser on personal computers to access the quizzes and final exam which requires a computer (not an ipad, tablet, or Chromebook). Canvas lists [minimum computer specifications](#) and [supported browsers](#) to ensure compatibility. The [Chrome browser](#) is recommended. Students are also encouraged to install the Canvas app on their [Android](#) phone or [iPhone](#) in order to receive mobile notifications and to access your courses via your mobile device.

## Technical Skills

Students should consider the [basic computer skills](#) needed to be successful in this course, which include:

- Reading and responding to emails
- Software application skills (PowerPoint, Word, Office365, etc.)
- Internet and library database browsing
- Copying and pasting
- Saving files in different formats
- Working with attachments
- File management

[Canvas 101](#) is a free self-paced course available for student to learn more about using the Canvas learning management system we are using for this course.

## Technology Privacy Policies

Valencia College has a firm commitment to protecting the privacy rights of its students. Any use of student records and information in this course will comply with the [Family Educational Rights and Privacy Act \(FERPA\)](#) , including third party tools and services used in this course. Privacy policies for the tools used in this course are listed below and at the point of use.

- [Valencia College privacy policy](#)
- [Canvas privacy policy](#)

If you have any concerns or issues with any of these requirements or policies, please contact your instructor.

## LifeMap Webpage

Students can access the [LifeMap webpage](#) in Atlas. It provides LifeMap support, including education plan, college transition, introduction to college, progression to degree, graduation transition, financial and career planner and lifelong learning. Copyright material obtained during this course can only be circulated within the class only. Students must refrain from recording, using or displaying the pictures, drawings, and presentations outside this course.

## Disclaimer

Changes in the syllabus, schedule, evaluation procedures, and/or homework assignments may be made at any time at the discretion of the professor. If you are absent, it is **your** responsibility to find out what, if any announcements, or changes have been made.