

## BIOE 16 - Introduction to Horticulture (2 units)

Summer 2024 (8 week session)

Wednesdays, 1:00-4:00

Classrooms: Thimann Labs 239 + Langenheim Greenhouses

### **INSTRUCTOR INFORMATION**

Instructor: Sylvie Childress, UCSC Greenhouse Director

Office Hours: Wednesdays, 4:00-5:00 (after class, at the Greenhouses) or by appointment

Contact: [sylviechildress@ucsc.edu](mailto:sylviechildress@ucsc.edu)

About me: I've been growing plants since I was a child working for my mother's small wholesale nursery business. Since then I've worked in propagation nurseries, wholesale and retail nurseries, California native plant restoration nurseries, and I've been working in UCSC's research and instructional greenhouses for the past 8 years. For fun I play soccer, botanize, garden, and volunteer with the California Native Plant Society.

### **COURSE INFORMATION**

Welcome to BIOE 16, the Introduction to Horticulture course! This class will take place fully in-person during the 8-week summer session. We will be meeting in the Thimann Labs 239 classroom at the beginning of each class. Since classes will consist of both classroom lecture work as well as hands-on activities in the Jean H. Langenheim Greenhouses, there will be many days that we are not in the classroom for the full class period.

Since portions of our classes will be held indoors, outdoors, or inside of greenhouses, I encourage you to dress in layers so that you will be comfortable in a wide range of temperatures.

Course communication and assignments will occur through the Canvas platform. If you haven't yet, please log on to Canvas and check out our course page! Ask the instructor if you need assistance accessing the site.

### **TEXTBOOK**

YOU DO NOT NEED TO PURCHASE A TEXTBOOK. I will be providing selected readings on Canvas. Should you wish to purchase a book to reference throughout the course and beyond, I will also provide a list of recommended texts.

### **ACCESSIBILITY**

UC Santa Cruz is committed to creating an academic environment that supports its diverse student body. If you are a student with a disability who requires accommodations to achieve equal access in this course, please affiliate with the DRC. Contact them by phone at 831-459-2089 or by email at [drc@ucsc.edu](mailto:drc@ucsc.edu). For students already affiliated, make sure that you have requested Academic Access Letters, where you intend to use accommodations. You can also request to meet privately with me during my office hours or by appointment, as soon as possible.

## **ACADEMIC INTEGRITY**

All members of the UCSC community benefit from an environment of trust, honesty, fairness, respect, and responsibility. You are expected to present your own work and acknowledge the work of others in order to preserve the integrity of scholarship.

Academic integrity includes:

- Following exam rules, using only permitted materials during an exam
- Viewing exam materials only when permitted by your instructor
- Incorporating proper citation of all sources of information
- Submitting your own original work

Academic misconduct includes, but is not limited to, the following:

- Disclosing exam content during or after you have taken an exam
- Copying/purchasing any material from another student or other source that is submitted as your own
- Plagiarism, including use of Internet material without proper citation
- Using cell phones or other electronics to obtain outside information during an exam without explicit permission from the instructor
- View the full policy and disciplinary procedures on academic dishonesty: [Academic Misconduct page](#) at the [Division of Undergraduate Education](#).

### **A Word About Integrity**

Integrity—other people’s perception of your word as true—is one of the most valuable assets you can cultivate in life. Being attentive to integrity in academic settings allows others to trust that you have completed work for which you are taking credit. This is symbolic of the public trust from which you will benefit in your future occupation and activism after you graduate from UCSC.

The creativity of your words, expression, understanding, and knowledge matters a great deal in your work as a sociologist, and it matters to me. My AI policy reflects the emphasis our discipline places on original thought and scholarship.

### **AI Policy**

In this class, I ask that you complete your work without using AI-generated sources to augment, think through, or write your assignments.

There is one exception: you are welcome to use AI tools for pre-submission editing (spell-check and grammar-check) as long as you do not use them for thinking or drafting.

On rare occasions, I may create an assignment in which I ask you to critique content generated by AI; if this occurs, I will provide clear assignment-specific AI-use guidelines within the prompt.

If you submit work that appears to have been written using AI sources, I will ask you to meet with me to discuss your thinking and writing process. If, after our conversation, I conclude it’s more likely than not that you did not personally complete an assignment you submitted under your name, I may refer you to your college provost for further conversation.

If you have questions about AI use and/or proper attribution of other people’s work, please come ask me! Scholarly citing is not particularly intuitive, and part of my role is to help you learn those conventions.

## PRINCIPLES OF COMMUNITY

The University of California, Santa Cruz expressly prohibits students from engaging in conduct constituting unlawful discrimination, harassment or bias... [More here](#). I am committed to providing an atmosphere for learning that respects diversity and supports inclusivity. We need to work together to build this community of learning. I ask all members of this class to:

- be open to and interested in the views of others
- consider the possibility that your views may change over the course of the term
- be aware that this course asks you to reconsider some “common sense” notions you may hold
- honor the unique life experiences of your colleagues
- appreciate the opportunity that we have to learn from each other
- listen to each other’s opinions and communicate in a respectful manner
- keep confidential discussions that the community has of a personal (or professional) nature
- ground your comments in the texts we are studying. Refer frequently to the texts and make them the focus of your questions, comments, and arguments. This is the single most effective way to ensure respectful discussion and to create a space where we are all learning together.

## TITLE IX/CARE ADVISORY

UC Santa Cruz is committed to providing a safe learning environment that is free of all forms of gender discrimination and sexual harassment, which are explicitly prohibited under Title IX. If you have experienced any form of sexual harassment, sexual assault, domestic violence, dating violence, or stalking, know that you are not alone. The Title IX Office, the Campus Advocacy, Resources & Education (CARE) office, and Counseling & Psychological Services (CAPS) are all resources that you can rely on for support. *Please be aware that if you tell me about a situation involving Title IX misconduct, I am required to share this information with the Title IX Coordinator.*

- You can report gender discrimination and sexual harassment and violence directly to the University’s [Title IX Office](#) by calling (831) 459-2462 or by using their [online reporting tool](#).

## STUDENT SERVICES

### [Counseling and Psychological Services](#)

Many students at UC Santa Cruz face personal challenges or have psychological needs that may interfere with their academic progress, social development, or emotional wellbeing. The university offers a variety of confidential services to help you through difficult times, including individual and group counseling, crisis intervention, consultations, online chats, and mental health screenings.

### [Campus Mobile Crisis Team](#)

If you are concerned about yourself or someone around you and feel they may be having a behavioral health crisis, do not hesitate to call our team. Behavioral Health concerns can include mental health or substance use related situations where you or someone around you may be a danger to self or others. Dial [831-502-9988](#) to reach the team.

### [Reporting and Support Services](#)

A resource to help students, faculty, staff and others report acts of bias as well as discrimination and harassment.

### [Student Success and Engagement Hub](#)

The Division of Student Success provides campus-wide coordination and leadership for student success programs and activities across departments, divisions, the colleges, and administrative units.

### [Tutoring and Learning Support](#)

At Learning Support Services (LSS), undergraduate students build a strong foundation for success and cultivate a sense of belonging in our Community of Learners. LSS partners with faculty and staff to advance educational equity by designing inclusive learning environments in Modified Supplemental Instruction, Small Group Tutoring, and Writing Support. When students fully engage in our programs, they gain transformative experiences that empower them at the university and beyond.

### [Slug Support Program](#)

College can be a challenging time for students and during times of stress it is not always easy to find the help you need. Slug Support can give help with everything from basic needs (housing, food, or financial insecurity) to getting the technology you need during remote instruction.

To get started with SLUG Support, please contact the [Dean of Students](#) Office at 831-459-4446 or you may send us an email at [deanofstudents@ucsc.edu](mailto:deanofstudents@ucsc.edu).

### [Slug Help/Technology](#)

The ITS Support Center is your single point of contact for all issues, problems or questions related to technology services and computing at UC Santa Cruz. To get technological help, simply email [help@ucsc.edu](mailto:help@ucsc.edu).

### [On-Campus Emergency Contacts](#)

For all other help and support, including the health center and emergency services, Click here to go to UCSC's [Emergency Services](#) page. **Always dial 9-1-1 in the case of an emergency.**

## **STUDENT FEEDBACK**

At the end of the quarter you will be asked to complete a Student Experience of Teaching survey for this course. SETs provide an opportunity for you to give valuable feedback on your learning that is honest and constructive. This anonymous feedback will help me consider modifications to the course that will help future students learn more effectively. Be sure to check out [CITL's Guide to Giving Useful Feedback to Instructors and TAs](#).

## LEARNING OUTCOMES

During this course, you can expect to learn:

- The fundamentals of plant form and function
- How a variety of environmental factors affect plant growth
- Multiple methods of seed and vegetative plant propagation
- Acquire a broad understanding of some emerging AgTech industry practices
- Methods to identify and address cultural and biological issues in the growing environment

## ASSIGNMENTS & ASSESSMENT

This is a 2 unit class, which assumes that students will spend an *average* of 6 hours per week on coursework. (3 hours of class time, plus 3 hours outside of class on readings, quizzes, and assignments)

Quizzes (x 7, on Canvas, 5 points each)	Material is pulled from lectures, readings, and class discussions; Quizzes are due by the start of class.	35 points
Paper: Crop Report	Draft with peer review comments (10 points) Final draft (10 points) (Total of 20 points possible)	20 points
Presentation: Emerging Topics in AgTech/Sustainability	4 minute powerpoint presentation	15 points
In class activities (worksheets)	Complete assignments during each class	16 points
Active participation and engagement with material	Come to class on time, do readings, and ask questions	14 points
<b>Total possible</b>		<b>100 points</b>
<i>Extra credit opportunity</i>	<i>(TBD, later in quarter)</i>	+ 5 points

## COURSE SCHEDULE

\*In addition to the deliverables listed here, you are also responsible for completing assigned readings in each week's module on Canvas.

Week	Topic	Deliverables
One June 26	History of horticulture, plant form and function, helpful terminology	
Two July 3	Introduce Paper 1: Crop Report Plant propagation part 1: Vegetative propagation	Quiz 1: Due by start of class
Three July 10	Plant propagation part 2: Seed propagation	Quiz 2: Due by start of class
Four July 17	Soil management and plant nutrition	Quiz 3: Due by the start of class Paper: Crop Report <b>First draft due</b> for peer review
Five July 24	The growing environment	Quiz 4: Due by the start of class Paper: Crop Report <b>Final paper due</b>
Six July 31	Water quality, irrigation Introduce Project 2: AgTech Presentation	Quiz 5: Due by the start of class
Seven Aug 7	Pests, diseases, and weeds	Quiz 6: Due by the start of class
Eight Aug 14	Last class! AgTech/Sustainability Presentations Greenhouse work wrap-up	Quiz 7: Due by the start of class Presentation: Ag Tech/ Sustainability <b>Presentations due</b>

## GRADING POLICY

**Your success in this class is important to me.** Grades in this class place a heavy emphasis on attendance and participation, and missing multiple classes will have a large impact on your grade. If you find yourself in this situation, please meet with me early on so that we can make a plan for your success in the class together. Many assignments by their nature will not be able to be completed late. For example: some of our in-class activities, the peer-review deadline for the Crop Report, and the AgTech/Sustainability presentation all require attendance in person. *Full or even partial credit for these activities may not be possible if they are completed late.* I encourage you to approach me during office hours, by appointment, or via email if you are having trouble completing assignments.