



Ecology of Agriculture

HCS 5602 Spring 2024

Course Information

Course times and location: Monday and Wednesday 8:40–10:00am in Kottman Hall 334; video-linked to remote graduate students

Credit hours: 3

Mode of delivery: In person

Instructor

Name: Dr. Wendy Klooster

Email: klooster.2@osu.edu

Phone Number: 614-688-2637

Office location: 217B Howlett Hall

Office hours: By appointment (Zoom or in person), schedule at go.osu.edu/klooster

Preferred means of communication:

- My preferred method of communication for questions is **email**.
- **NOTE: I do not respond to emails on evenings, weekends, or holidays**
- My class-wide communications will be sent through the Announcements tool in CarmenCanvas. Please check your [notification preferences](https://go.osu.edu/canvas-notifications) (go.osu.edu/canvas-notifications) to be sure you receive these messages.

Prerequisites

ENR 3000, and 6 sem cr hrs of HCS taken at the 3000-level or above; or Grad standing

Course description

This course will prepare students for transition from student to professional by advancing their mastery of edible and ornamental horticultural crop principles and practices as they are driven by the interaction of cultivar genetics, plant physiology, and environmental influences; and by

exploring issues of economic and environmental sustainability and production efficiencies on a global scale.

Course learning outcomes

By the end of this course, students should successfully be able to:

- Understand professionalism and professional expectations, identify continuing education opportunities after graduation, as well as gain exposure to global production issues.
- Convey information, both individually and collaboratively, within a concise written and oral format to help them grow professionally.
- Identify production practices that could be altered to improve pest management, nutrient management and cropping system sustainability through using systems-scale thinking and development.
- Demonstrate scientific competence in horticultural and/or agronomic sciences.
- Appreciate diverse issues within horticultural and agronomic sciences.
- Use appropriate form of communication effectively at a professional level.

How This Course Works

Mode of delivery: This course is offered in person and requires attendance and engagement in class discussions. Lectures will be video-linked to remote graduate students, but remote students will be required to have their camera on and fully participate in all video-linked lecture periods. Lectures will not be recorded and will only be available via Zoom for remote graduate students or for pre-approved extenuating circumstances, but lecture slides will be posted on Carmen for review purposes. Keep in mind that a portion of the final grade is dependent on attendance and participation in class activities and discussions.

Credit hours and work expectations: This is a 3 credit-hour course. According to [Ohio State bylaws on instruction](https://www.go.osu.edu/credithours) (go.osu.edu/credithours), students should expect around 3 hours per week of time spent on direct instruction (instructor content and Carmen activities, for example) in addition to 6 hours of homework (reading and assignment preparation, for example) to receive a grade of C average.

Attendance and participation requirements: Research shows regular participation is one of the highest predictors of success. With that in mind, I have the following expectations for everyone's participation:

In-person attendance: Twice per week except for holidays

You are expected to attend all in-person class periods. If you have a situation that might cause you to miss class, especially multiple class periods, discuss it with me *as soon as possible* to arrange accommodations, as feasible depending on course activities.



Zoom meetings and office hours: Optional

Office hours are optional, but I will generally be available before or after class for quick questions, or you can use the link go.osu.edu/Klooster to schedule longer meetings.

Course Materials, Fees, and Technologies

Required Materials and/or Technologies

None required, but reading materials will be provided via CARMEN (carmen.osu.edu) with links to library resources or host sites when copyrights limit direct sharing.

Required Equipment

Computer: current Mac (MacOS) or PC (Windows 10) with high-speed internet connection.

Other: a mobile device (smartphone or tablet) to use for BuckeyePass authentication

If you do not have access to the technology you need to succeed in this class, review options for [technology and internet access](https://go.osu.edu/student-tech-access) (go.osu.edu/student-tech-access).

Required Software

Microsoft Office 365: All Ohio State students are now eligible for free Microsoft Office 365. Visit the [installing Office 365](https://go.osu.edu/office365help) (go.osu.edu/office365help) help article for full instructions.

CarmenCanvas Access

You will need to use [BuckeyePass](https://buckeyepass.osu.edu) (buckeyepass.osu.edu) multi-factor authentication to access your courses in Carmen. To ensure that you are able to connect to Carmen at all times, it is recommended that you do each of the following:

Register multiple devices in case something happens to your primary device. Visit the [BuckeyePass - Adding a Device](https://go.osu.edu/add-device) (go.osu.edu/add-device) help article for step-by-step instructions.

Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click **Enter a Passcode** and then click the **Text me new codes** button that appears. This will text you ten passcodes, good for 365 days, that can each be used once.

[Install the Duo Mobile application](https://go.osu.edu/install-duo) (go.osu.edu/install-duo) on all of your registered devices for the ability to generate one-time codes in the event that you lose cell, data, or Wi-Fi service.

If none of these options will meet the needs of your situation, you can contact the IT Service Desk at [614-688-4357 \(HELP\)](tel:614-688-4357) and IT support staff will work out a solution with you.

Technology Skills Needed for This Course

Basic computer and web-browsing skills

[Navigating CarmenCanvas](https://go.osu.edu/canvasstudent) (go.osu.edu/canvasstudent)

[CarmenZoom virtual meetings](https://go.osu.edu/zoom-meetings) (go.osu.edu/zoom-meetings)

[Recording a slide presentation with audio narration and recording, editing and uploading video](https://go.osu.edu/video-assignment-guide) (go.osu.edu/video-assignment-guide)

Technology Support

For help with your password, university email, CarmenCanvas, or any other technology issues, questions or requests, contact the IT Service Desk, which offers 24-hour support, seven days a week.

Self Service and Chat: go.osu.edu/it

Phone: [614-688-4357 \(HELP\)](tel:614-688-4357)

Email: servicedesk@osu.edu

Grading and Faculty Response

How Your Grade is Calculated

ASSIGNMENT CATEGORY	POINTS
Engagement and professionalism	100
Concept maps (3 x 20 pts)	60
Current issues discussion posts (4 x 15 pts)	60
Academic reflection writing assignment	20
Presentation (scaffolded) & peer reviews	75
Total	315

See [Course Schedule](#) for due dates.

Descriptions of major course assignments

Engagement and professionalism

Description: At the beginning, middle, and end of the course, you are required to complete brief self-assessment surveys. The intro survey is a series of questions where you are asked to provide some background information on yourself and familiarity with the topics. The mid-semester and exit surveys ask you reflect upon the course components, your personal effort in the class, and how well the activities worked out. Each week throughout the term, you are expected to attend all class periods (on time and for the full period), actively participate in discussions and activities, and complete all assignments. Only two *excused* absences (providing valid documentation) will be allowed and associated make-up work accepted; beyond that, any absence for any reason will result in a loss of points for that day and acceptance of make-up work will not be guaranteed. If you have a situation that might cause you to miss class, especially multiple class periods, you must discuss it with me *within 24 hours of the absence*. You will be required to work with Student Life Disability Services or Student Advocacy, but I will coordinate as needed to provide equitable opportunities for all students. Furthermore, you are expected to behave in a respectful and professional manner throughout every aspect of this course.

Academic integrity and collaboration: Any behavior including rude, dehumanizing, or unprofessional language or actions, whether expressed physically, verbally, or in writing, is not permitted, will result in a deduction of points, and will be reported to the office of student conduct; this includes swearing, threats, derogatory statements, and similar actions, and applies to interactions among students and with the instructor and any guest speaker(s).

Cmap assignments

Description: Topics presented and discussed in class will be integrated and 'mapped' into the main course topic of agroecology. We will be using Cmap (or similar) software to help create visual representations of the interconnectedness of the topics. You will be required to add to your concept maps throughout the course and submit updated versions (as indicated in the schedule) by uploading to a Carmen dropbox by the posted deadlines. Once all course topics have been covered, a final version of the concept map will be due to Carmen.

Academic integrity and collaboration: Your written assignments, including concept maps, should be your own original work. In formal assignments, you should follow APA style to cite the ideas and words of your research sources (MLA format is not appropriate for scientific writing). You are encouraged to ask a trusted person to review your assignments before you turn them in, but no one else should revise or rewrite your work. Also, you are not allowed to submit the same work to fulfill assignments in different classes.

Writing assignments

Description: There will be five written assignments throughout the semester based on topics related to agroecology. Prompts will be posted on Carmen, and you will be required to submit a written response to each topic. Assignments must be typed and submitted to the Carmen dropbox and will be checked for plagiarism and AI generation.

Academic integrity and collaboration: Your written assignments should be your own original work. Any time you are presenting a factual statement, you should cite a reference using APA format or following the guidelines of a reputable scientific journal; MLA format is not appropriate for scientific writing. You are encouraged to ask a trusted person to proofread your assignments before you turn them in, but no one else should revise or rewrite your work. All written assignments will be evaluated using Turnitin software to check for any plagiarism. Also, you are not allowed to submit the same work to fulfill assignments in different classes.

Presentation

Description: You will be required to give a 15-minute oral presentation throughout the semester (schedule will be determined during the first week of class). Presentations will cover a topic you select, but must pre-approved by me (the instructor), and should focus on an advanced subject related to agroecology. Details posted in Carmen. All students are required to view all other presentations and provide professional and constructive peer reviews. However, if any presentation contains rude, dehumanizing, or unprofessional language, it will be ended immediately, the recording will not be posted for later viewing, and the presenter will earn zero points for that assignment.

Academic integrity and collaboration: The course includes many opportunities for formal collaboration with your classmates. And while you are encouraged to discuss the topics with each other and peer-review early drafts, your presentation content and video must be your own original work.

Late assignments

Late submissions will be marked down by 10% of the original assignment value per day (including partial days). Please refer to Carmen for due dates. And if extenuating circumstances prevent you from completing any course assignment, please reach out to me ASAP to arrange an accommodation. You will be required to work with Student Life Disability Services, but I will follow approved accommodations to provide equitable opportunities for all students. For extended issues, please work with Student Advocacy to arrange necessary accommodations.

Grading scale

93–100: A
90–92.9: A-
87–89.9: B+
83–86.9: B
80–82.9: B-
77–79.9: C+
73–76.9: C
70–72.9: C-
67–69.9: D+
60–66.9: D
Below 60: E

Instructor Feedback and Response Time

I am providing the following list to give you an idea of my intended availability throughout the course. Remember that you can call [614-688-4357 \(HELP\)](tel:614-688-4357) at any time if you have a technical problem.

Preferred contact method: If you have a question, please contact me first through my Ohio State email address. I will do my best reply to emails within **24 hours on days when class is in session at the university** (i.e. not weekends, holidays, or breaks).

Class announcements: I will send all important class-wide messages through the Announcements tool in CarmenCanvas. Please check [your notification preferences](https://go.osu.edu/canvas-notifications) (go.osu.edu/canvas-notifications) to ensure you receive these messages.

Discussion board: I will check and reply to messages in the discussion boards at the end of each week, and I will try to check discussion posts periodically throughout the week.

Grading and feedback: For assignments submitted by the due date, I will try to provide feedback and grades within **seven business days**. Assignments submitted after the due date may have reduced feedback and grades may take longer to be posted.

Other Course Policies

Engagement and Professionalism Guidelines

The following are my expectations for how we should communicate as a class. Above all, please remember to be respectful and thoughtful.

Tone and civility: Let's maintain a supportive learning community where everyone feels safe and where people can disagree amicably. I will provide specific guidance for discussions on controversial or personal topics as needed.

Citing your sources: Any time you are presenting a factual statement in writing, you should cite a reference using APA format or following the guidelines of a reputable scientific journal; MLA format is not appropriate for scientific writing. Furthermore, when we have academic discussions, it will be helpful, and at times critical, to cite your sources to back up what you say.

Plagiarism: No form of plagiarism will be tolerated, including self-plagiarism. In general, you are prohibited in university courses from turning in work from a past or concurrent class to your current class, even if you modify it. If you want to revisit a topic you've explored in previous courses, please discuss the situation with me.

Academic Misconduct/Academic Integrity

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the University's Code of Student Conduct, and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's Code of Student Conduct and this syllabus may constitute Academic Misconduct.

The Ohio State University's Code of Student Conduct (Section 3335-23-04) defines academic misconduct as: Any activity that tends to compromise the academic integrity of the University, or subvert the educational process. Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University's Code of Student Conduct is never considered an excuse for academic misconduct, so I recommend that you review the Code of Student Conduct and, specifically, the sections dealing with academic misconduct.

If I suspect that a student has committed academic misconduct in this course, I am obligated by University Rules to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University.

If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.

Creating an Environment Free from Harassment, Discrimination, and Sexual Misconduct

The Ohio State University is committed to building and maintaining a community to reflect diversity and to improve opportunities for all. All Buckeyes have the right to be free from harassment, discrimination, and sexual misconduct. Ohio State does not discriminate on the basis of age, ancestry, color, disability, ethnicity, gender, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (childbirth, false pregnancy, termination of pregnancy, or recovery therefrom), race, religion, sex, sexual orientation, or protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment. Members of the university community also have the right to be free from all forms of sexual misconduct: sexual harassment, sexual assault, relationship violence, stalking, and sexual exploitation.

To report harassment, discrimination, sexual misconduct, or retaliation and/or seek confidential and non-confidential resources and supportive measures, contact the Office of Institutional Equity:

1. Online reporting form at equity.osu.edu,
2. Call 614-247-5838 or TTY 614-688-8605,
3. Or Email equity@osu.edu

The university is committed to stopping sexual misconduct, preventing its recurrence, eliminating any hostile environment, and remedying its discriminatory effects. All university employees have reporting responsibilities to the Office of Institutional Equity to ensure the university can take appropriate action:

- All university employees, except those exempted by legal privilege of confidentiality or expressly identified as a confidential reporter, have an obligation to report incidents of sexual assault immediately.
- The following employees have an obligation to report all other forms of sexual misconduct as soon as practicable but at most within five workdays of becoming aware of such information: 1. Any human resource professional (HRP); 2. Anyone who supervises faculty, staff, students, or volunteers; 3. Chair/director; and 4. Faculty member.

Counseling and Consultation Services/Mental Health

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing.



If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614-292-5766. CCS is located on the 4th floor of the Younkin Success Center and 10th floor of Lincoln Tower. You can reach an on-call counselor when CCS is closed at 614-292-5766 and 24 hour emergency help is also available 24/7 **by dialing 988 to reach the Suicide and Crisis Lifeline.**

For students in the College of Food, Agricultural, and Environmental Sciences, David Wirt, wirt.9@osu.edu, is the CFAES embedded mental health counselor on the Columbus campus. To contact David, please call 614-292-5766. Students should mention their affiliation with CFAES if interested in speaking directly with David.

Disability Accommodations

The university strives to maintain a healthy and accessible environment to support student learning in and out of the classroom. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion.

If you are isolating while waiting for a COVID-19 test result, please let me know immediately. Those testing positive for COVID-19 should refer to the [Safe and Healthy Buckeyes site](#) for resources. Beyond five days of the required COVID-19 isolation period, I may rely on Student Life Disability Services to establish further reasonable accommodations. You can connect with them at slds@osu.edu; 614-292-3307; or slds.osu.edu.

Diversity Statement

The Ohio State University affirms the importance and value of diversity of people and ideas. We believe in creating equitable research opportunities for all students and to providing programs and curricula that allow our students to understand critical societal challenges from



diverse perspectives and aspire to use research to promote sustainable solutions for all. We are committed to maintaining an inclusive community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among all members; and encourages each individual to strive to reach their own potential. The Ohio State University does not discriminate on the basis of age, ancestry, color, disability, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, race, religion, sex, gender, sexual orientation, pregnancy, protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment.

To learn more about diversity, equity, and inclusion and for opportunities to get involved, please visit:

- odi.osu.edu
- odi.osu.edu/racial-justice-resources
- odi.osu.edu/focus-on-racial-justice
- cbssc.osu.edu

In addition, this course adheres to **The Principles of Community** adopted by the College of Food, Agricultural, and Environmental Sciences. These principles can be found at cfaesdei.osu.edu/about-us/cfaes-principles-community. For additional information on Diversity, Equity, and Inclusion in CFAES, contact the CFAES Office for Diversity, Equity, and Inclusion (cfaesdei.osu.edu). If you have been a victim of or a witness to harassment or discrimination or a bias incident, you can report it online and anonymously (if you choose) at equity.osu.edu.

Religious accommodations

It is Ohio State's policy to reasonably accommodate the sincerely held religious beliefs and practices of all students. The policy permits a student to be absent for up to three days each academic semester for reasons of faith or religious or spiritual belief.

Students planning to use religious beliefs or practices accommodations for course requirements must inform the instructor in writing no later than 14 days after the course begins. The instructor is then responsible for scheduling an alternative time and date for the course requirement, which may be before or after the original time and date of the course requirement. These alternative accommodations will remain confidential. It is the student's responsibility to ensure that all course assignments are completed.

Weather or other short-term closing

Should in-person classes be canceled, I will notify you as to which alternative methods of teaching will be offered to ensure continuity of instruction for this class. Communication will be via CarmenCanvas.

Course Schedule for HCS 5602 (SP24)

Refer to the CarmenCavas course site for any revisions to topics and due dates.

Week	Date	Topic(s)	Assignment(s)
1	Mon., Jan. 8	Intro, expectations, & information literacy	Intro survey
	Wed., Jan. 10	Principles and practices of agroecology	
2	Mon., Jan. 15	No class: Martin Luther King Jr. Day	N/A
	Wed., Jan. 17	Foundational agricultural principles	
3	Mon., Jan. 22	Organic production & traditional systems	Presentation topic & date
	Wed., Jan. 24	Foundational ecological principles	
4	Mon., Jan. 29	Diversity measurements & impacts of scale	<i>Current issues 1</i>
	Wed., Jan. 31	<i>Current Issues discussion</i>	
5	Mon., Feb. 5	Evolutionary dynamics & GMOs	Concept map 1
	Wed., Feb. 7	Interspecies interactions & population growth	
6	Mon., Feb. 12	Grad school and job applications	Annotated bibliography
	Wed., Feb. 14	No class: work on presentations	
7	Mon., Feb. 19	Technology in agriculture (<i>JD Bethel</i>)	<i>Current issues 2</i>
	Wed., Feb. 21	<i>Current Issues discussion</i>	
8	Mon., Feb. 26	Water/carbon trading (<i>Dr. Brent Sohngen</i>)	N/A
	Wed., Feb. 28	Biofuels; student presentations	
9	Mon., Mar. 4	Pest management; student presentations	Mid-semester survey
	Wed., Mar. 6	Invasive species; student presentations	
10	Mar. 11–15	Spring Break	N/A
11	Mon., Mar. 18	Climate change (<i>Dr. Aaron Wilson</i>)	Concept map 2
	Wed., Mar. 20	Soil health; student presentations	
12	Mon., Mar. 25	Professional etiquette and interviews	<i>Current issues 3</i>
	Wed., Mar. 27	<i>Current Issues discussion</i>	
13	Mon., Apr. 1	Visas & labor policies (<i>Dr. Margaret Jodlowski</i>)	N/A
	Wed., Apr. 3	Subsidies & policies; student presentations	
14	Mon., Apr. 8	No class: Solar eclipse	N/A
	Wed., Apr. 10	Food security; student presentations	
15	Mon., Apr. 15	Global agriculture; student presentations	All presentation peer reviews <i>Current issues 4</i>
	Wed., Apr. 17	<i>Current Issues discussion</i>	
16	Mon., Apr. 22	Prof. dev.; Course synthesis & wrap-up	Exit survey
Final	Sun., Apr. 28	Submit final version of concept map and academic reflection to Carmen	Concept map 3 (final version) Academic reflection