

Introduction to Cultivated Plants – Fall 2024

Crop_Sci/Hort 102 (3 credits)



Class Time and Location

MWF 11:10 – 12:00

Pullman – Spark Building G-45

Tri-Cities (via AMS) – Wine Science Center 202

Everett – (via AMS) – EVRT 263

Instructors

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Jack Kelley

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Graduate student, Crop and Soil Sciences

Instructor Contact

The best way to contact us is by email, through CANVAS, or directly in class. I check and respond to messages frequently. My priority is to support you in this course so I will make myself available to answer questions via e-mail, Zoom meeting, or in person as necessary.

Course Overview

Welcome to *Introduction to Cultivated Plants*. Most of you are here because you have an interest in plants. You may not know what to do with that interest, but after this semester you should have a better understanding of the many plant-related career opportunities available to you.

The course introduces the principles of plant science with an emphasis on cultivated crops/plants of the Pacific Northwest. Topic areas include plant classification, plant anatomy and physiology, climatic influences on plants, plant metabolism, the heredity of traits, and crop breeding. You will also develop an assignment focused on the superpower of a plant of your choosing. The purpose of this project is to help you, as a science student, begin to develop research and writing skills that are crucial to becoming a successful scholar and scientist.

Throughout the semester, various faculty from Crop and Soil Sciences, Horticulture, School of the Environment, and other departments will present lectures in their area of expertise. This exposes you to multiple perspectives in the diverse field of plant science while learning about the scientific and technological pursuit of crop production. We encouraged you to relate your ideas and experiences to your learning. The goal is for you to gain a better understanding of your academic major, 200- and 300-level courses you might wish to take, and your future careers. Classes will be mostly lecture-based, with time for discussion, collaborative learning, and small group work.

Student Learning Outcomes:

- Illustrate the diversity and importance of cultivated plants.
- Identify the anatomy and morphology of roots, stems, leaves, flowers, fruits, and seeds.
- Demonstrate knowledge of basic plant processes.
- Classify cultivated species with taxonomical and scientific language.
- Identify and explain abiotic and biotic influences on plant growth.
- Compare and contrast the processes of plant growth for multiple species.
- Describe the production systems and related issues for several cultivated plant groups.
- Write with academically appropriate syntax, grammar, terminology.
- Practice self-directed inquiry using both primary and background sources.
- Examine peer perspectives during group work.
- Communicate effectively.

Course Materials:

- **Textbook (optional)** *“Plant Science – Growth, Development, and Utilization of Cultivated Plants”*, 5th or 6th edition.
Authors: Margaret J. McMahon, Anton M. Kofranek, Vincet E. Rubatzky. Prentice Hall, 2011.
 - Recommended for students planning to take 200- and 300- level crop science, biology, and horticulture courses. Lectures, readings, and class discussions will usually provide most of the necessary content.
- **Electronic Device to access Canvas during class** (laptop, tablet, phone, etc.) to take daily quizzes.

Distance Learning – video conferencing – (Tri-Cities and Everett campuses)

- Lectures will be recorded live from the Pullman campus Spark Building and video streamed to the Tri-Cities and Everett campuses.
- Class recordings will be available through CANVAS usually 3-4 hours after class.
- I encourage Tri-Cities and Everett students to:
 - Participate in class discussions. Do not raise your hand, but speak loudly and say “question from Tri-Cities”.
 - Let me know if you are having audio/visual problems.
 - Sit together in the space. This way, the cameras can focus in on one section, and we can see you.

Canvas - Online Course Management system

- The online course management system is CANVAS.
- Please check CANVAS frequently for:
 - Announcements
 - Grades
 - Daily quizzes and tests will be taken in Canvas
 - Lecture power points
 - Articles to read

- Detailed assignment information
- Recordings of class lectures

Class Organization:

- Due to the constraints of a large class and multiple distributed locations, most course material is presented in a PowerPoint format. It is the responsibility of speakers to make their presentations engaging by including different media, narratives, and encouraging student-student interaction. Your role is key. Ask questions and relate your experiences.
- Presentations are organized in an outline form on PowerPoint slides for you to take notes during class (if you choose). Important concepts and terms are listed in the order they are presented. These notes will help you review content and study for tests.

Grading Breakdown

Item	Points per item	Total points possible
Daily quizzes (33 total - drop 3 =30)	5	150
Tests (best 4 out of 5)	75	300
Final Exam (cumulative)	75	75
Practicums (5 – test reviews)	30	150
Plant Superpower Project (PSP)	200	200
		875 (total points possible)

A = 93% +	B+ = 87-89%	C+ = 77-79%	D+ = 67-69%	F = below 60%
A- = 90-92%	B = 83-86%	C = 73-76%	D = 60-66%	
	B- = 80-82%	C- = 70-72%		

- **Reading Assignments:**
 - Throughout the semester, you will have various reading assignments accessed in CANVAS. Content in reading assignments may appear on quizzes and/or tests.
- **Daily quizzes: (33 quizzes worth 5 pts each, drop lowest 3)**
 - Daily, brief quizzes will be given on a previous presentation and/or reading assignment. You will access quizzes through Canvas with a password given to you in class. If you are not in class, you cannot access the quiz. It will be important to que up Canvas before class begins. We will have “practice” quizzes in Week 1 to make sure technology and access are working.
 - Once you begin, you will have 5 minutes to answer three questions.
 - If you forgot your electronic device (to access Canvas), you may use pen and paper (Tri-Cities and Everett send an e-mail to me).
 - Your lowest 3 quizzes will be dropped at the end of the semester.
- **Practicum Activities (5 practicums worth 30 pts each)**
 - Prior to tests, I will devote a class period to reviewing recent lecture material, answering student questions, and preparing for the test.
 - Students will work in groups of 2-3 to complete a workbook assignment promoting higher-ordered comprehension of major themes, terms, and concepts presented in past lectures.
 - We design these practicums to develop critical thinking while developing interpersonal communication and peer collaboration skills.
 - One person from each group turns in their group’s assignment **with all group member names (both first and last)** and student ID numbers **by 1:00pm that day in CANVAS.**
 - If you know ahead of time that you will have to miss class due to a pre-planned activity, please contact me to make alternate plans.

- **Tests (5 tests worth 75 pts each, 1 final exam (test 6) – 75 pts)**
 - An online test will be given every 2 to 2.5 weeks of the semester through Canvas.
 - The tests will be available the Thursday after a Monday practicum review. All tests will open at 6:00 a.m. and close at 11:59 PM on the assigned date.
 - You will have 50 minutes to complete the tests. There are 20-25 questions per test. The tests are formatted as multiple-choice (1 answer), multiple answer (more than 1 answer), matching, ordering, true/false questions, and short answer. These questions will assess student comprehension of major themes, terms, and concepts presented in lecture, readings, and discussion.
 - You have the option of dropping your lowest grade on a test, including the comprehensive final exam. If you do well on all 5 regular tests you can elect not to take the final exam and that score will be dropped.
 - If you have technical difficulties while taking a test or exam, e-mail me immediately. Your e-mail time stamp will serve to document the occurrence.
 - **You will take all tests alone (without help from others). Please see academic integrity policy below.**
 - **You may use your notes.**

- **Plant Superpower Project - (200 points)**
 - This is a semester long writing and research project broken down into parts due throughout the semester
 - 14 Weekly Assignments will culminate in a final Plant Superpower Report
 - Weekly assignments are submitted in CANVAS
 - A more detailed set of guidelines and instructions for the Plant Superpower Assignment can be accessed on CANVAS

Course Policies

Instructor Policies

- Please arrive on time for class meetings. If you arrive late enter the room quietly to minimize disruptions on other students.
- Mobile phones, laptops etc. should be muted while in class.
- Respect your instructor, guest speakers, and fellow classmates.

Submitting Assignments in CANVAS

- **Submission Policy:**
 - When you submit assignments into CANVAS you must use only the acceptable file types (see below). If you try to submit a different file type, CANVAS will not accept your submission.
 - Check to see if your submission has been accepted by clicking back into the assignment in the gradebook. Click here for instructions: [How-do-I-know-when-my-assignment-has-been-submitted in CANVAS](#)
 - Label all assignments appropriately, beginning with your last name: “Pumphrey-phase 1 PSP “
 - You are responsible for submitting all files properly. If you are having trouble, please contact me for help or use the CANVAS help feature.
- **Acceptable Electronic File Policy:**
 - There are many types of electronic devices used to create documents. Due to the wide array of file types, we are limiting our acceptable file format. The following file types are acceptable:
 - pdf
 - doc
 - docx
 - ppt

- pptx

Attendance and Makeup Policy:

- **Attendance:**
 - Attendance is key to your success in this course. Students are required to attend class in person. This includes students in tri-cities and Everett. The course Zoom link is strictly for videoconferencing and not for the use of individual students. Exceptions to this policy may apply if students contact the instructor ahead of time. Attendance is apparent through your performance on daily quizzes.
 - **Makeup policy:**
 - **Quizzes, tests, practicums** – there are no makeups unless you contact me prior to a scheduled absence. In extenuating circumstances (illness, etc.), I will make alternative arrangements for you to complete an assignment.
 - **Plant Superpower Assignments** - Phases of this assignment may be submitted late for partial credit., Each future phase builds on the past, so it is to your advantage to complete and submit these assignments on time.
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WSU POLICIES

University Syllabus

Students are responsible for reading and understanding all university-wide policies and resources pertaining to all courses (for instance: accommodations, care resources, policies on discrimination or harassment), which can be found in the [university syllabus](#).

Academic Integrity Statement

You are responsible for reading WSU's [Academic Integrity Policy](#), which is based on [Washington State Law](#). If you cheat in your work in this class you will:

- Fail the assignment, which may lead to failing the course.
- Be reported to the [Center for Community Standards](#).
- Have the right to appeal my decision.
- Not be able to drop or withdraw from the course until the appeals process is finished.

If you have any questions about what you can and cannot do in this course, ask me.

If you want to ask for a change in my decision about academic integrity, use [the form](#) at the [Center for Community Standards](#) website. You must submit this request within 21 calendar days of the decision.

FERPA compliance guidelines for class recordings

- We will use technology for virtual meetings and/or recordings in this course. Our use of such technology is governed by FERPA, WSU's Electronic Communication Policy (EP4: <https://policies.wsu.edu/prf/index/manuals/executive-policy-manual-contents/ep4-electronic-communication-policy/>), and WSU's Student Code of Conduct (<https://communitystandards.wsu.edu/>). A record of all meetings and recordings is kept and stored by WSU, in accordance with WSU's Executive Policies and FERPA. Your instructor will not share recordings of your class activities outside of course participants, which includes your fellow students, TAs, and/or other instructional partners engaged with this course. You may not share recordings with individuals outside of this course. Doing so may result in disciplinary action.

Crop Sci/Hort 102 Course Schedule

Important Dates:

Practicums: during class time	Tests: (open at 6:00 a.m., close at 11:59 p.m.)
Practicum 1 – Mon. Sept 9	Test 1 – Thursday Sept. 12
Practicum 2 – Mon. Sept. 23	Test 2 – Thursday Sept. 26
Practicum 3 – Mon. Oct. 14	Test 3 – Thursday Oct. 17
Practicum 4 – Mon. Nov. 4	Test 4 – Friday, Nov. 8
Practicum 5 – Mon. Dec. 2	Test 5 – Thursday Dec. 5
Final Exam (comprehensive)	Dec. 12

	Plant Superpower Project Assignments:	Date Due (all due by 11:59 pm)
1	Phase 1 –Form	Sun. Aug. 25
2	Phase 2: part 1 “Background Sources” Form	Tues. Sept. 3
3	Phase 2: part 2 “Thinking about your primary sources” - form	Sun. Sept. 8
4	Phase 2: part 3 “Primary Sources” – form	Sun. Sept. 15
5	Phase 3 – “Storyboard of Plant Superpower”	Sun. Sept. 22
6	Phase 4: part 1 “Plant Background Paragraphs	Sun. Sept. 29
7	Phase 4: part 2 “Superpower Background Paragraphs	Sun. Oct. 6
8	Phase 4: part 3 “Scientific Details Paragraphs	Sun. Oct. 13
9	Phase 4 - PEER OBSERVATION 1 (paragraph)	Sun. Oct. 20
10	Phase 4: part 4 – Narrative Paragraphs	Sun. Oct. 27
11	Phase 4: part 5 – Full Draft	Sun. Nov. 3
12	Phase 5: part 1- PEER OBSERVATION 2 “FULL TEXT OF PROJECT”	Sun. Nov. 10
13	Phase 5: part 2 – Complete second DRAFT of project	Sun. Nov. 17
14	Phase 6 – Final draft	Sun. Dec. 1

Potential Guest Speaker topics for Crop_Sci/Hort 102

Viticulture (grape production)	Alternative crops
Vegetable seed production	Forestry
Apple breeding	Potatoes
Wheat production and breeding	Turf and forages
Small fruits	Vegetables

Syllabus Changes: Information in this syllabus, on CANVAS, and in in-class handouts is correct as of this writing, but could change if something unexpected occurs. Changes will be presented in class, in CANVAS announcements, and through e-mail.