

# Syllabus:

## Plant Disease Diagnosis

Instructor: Neil Bell

Course URL: <https://my.oregonstate.edu>

**Plant Disease Diagnosis** covers basic principles of problem diagnosis in crop, garden and landscape plants. It includes detail on distinguishing cultural and environmental problems from those from biotic causes.

### Completing the Certificate

To successfully complete the certificate, students will submit a plant problem diagnosis project at week ten and pass the final test.

*Students in the certificate are expected to be active participants, posting and responding to discussion boards each week and completing assignments. Students needing extra time to complete assignments should email the instructor.*

### Course content:

Blackboard — This course will be delivered via Blackboard, your online learning community, where you will interact with your classmates and with me. Within the course Blackboard site you will access the learning materials, tutorials, and syllabus; discuss issues; submit assignments; take quizzes; email other students and the instructor; participate in online activities; and display your projects

Week	Topic	Reading	Specifics to know and understand
1	The importance and the challenge of plant problem diagnosis	USGS water quality information	The value of correct plant problem identification
2	A systematic approach to plant problem diagnosis: Part 1	OSU Dept of Horticulture Landscape plants website	Plant identification. Normal plant characteristics Identifying populations and patterns.
3	A systematic approach to plant problem diagnosis: Part 2	APS Press, Plant Disease Diagnosis	Parts of the plant that are affected Patterns on affected plant parts Timeline of symptom development
4	A systematic approach to plant problem diagnosis: Part 3	APS Press, Plant Disease Diagnosis	Progression of symptoms. Signs of problems vs symptoms. Signs of disease, insect, other pests
5	Environmental causes of plant problems	PNW Disease Management handbook, pgs 66-68	Characteristics of cold injury, excess sun or shade, drought or drainage

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			problems, wind, etc. Correct identification of these problems and recommending solutions
6	Cultural causes of plant problems	PNW Disease Management handbook	Soil compaction, planting practices, pesticide use and other cultural practices. Correct identification of these problems and recommending solutions
7	Soil quality issues and nutritional problems	PNW Disease Management handbook	Issues with soil quality especially in constructed landscapes, nutritional deficiencies and excesses. Correct identification of these problems and recommending solutions
8	Vertebrate pest damage and miscellaneous pests	Internet Center for wildlife damage control	Symptoms and signs of vertebrate and miscellaneous pests. Correct identification of these problems and recommending solutions
9	Insect and mite pests	PNW Insect Management Handbook	Symptoms and signs of insect and mite pests. Correct identification of these problems and recommending solutions
10	Plant Disease and nematode problems	PNW Disease Management Handbook	Symptoms and signs of plant diseases and nematodes. Correct identification of these problems and recommending solutions
11	Final		

## Measurable Student Learning Outcomes:

Students completing this course will be able to:

1. Follow a systematic approach to diagnosing a plant problem correctly based on available symptoms and signs.
2. Distinguish environmental and cultural problems from those caused by biotic organisms.

Learning resources: Learning material will be provided in weekly units in the Course Documents section of the course Blackboard site.

Evaluation of student performance: Readings for each week will be posted. You may work through each group of lessons at your own pace. Once a lesson has been posted it will remain on the web site for the remainder of the term.

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## **Student Plant Problem Presentation:**

Each student will create a video or photo and text presentation about a plant problem observed in the student's area. The problem can be in any situation: private landscape, a public landscape, agricultural or forestry situation, anything. Include at least one photo of the problem in question. Use the systematic process for problem diagnosis to describe the problem and a probable cause for the problem. This is your chance to explore and expand your knowledge of the process of plant problem diagnosis using the techniques and examples described in this course.

The Plant Problem Presentation is part of the Certificate requirements and is your opportunity to use the systematic process and other class material to explore a plant problem of your choosing to propose a diagnosis for the problem. The problem you choose can be from your house, garden or a landscape or garden problem you happen across. I don't expect you to definitively solve the problem, just use whatever information is available to you and the information provided in class to suggest a reasonable diagnosis. Include photos of the problem in your Presentation. Any diagrams or other ways of describing the problem are helpful. I included a couple of examples of the sort of thing we are looking for. They are Word documents which include photos, diagrams, tables and so on to describe the problem. The Presentation does not have to be a Word document, any media is fine.

See Student Plant Problem document in Course Information or Assignments for a more detailed description and example of the assignment.

## **Class Participation**

For each section of the course, we will have discussion groups on the course Blackboard site. Your participation should be more than "I agree". You should contribute ideas, thoughts or questions that show you've read and thought about both the course topics and the comments of your class mates.

## **Statement Regarding Students with Disabilities:**

Accommodations are collaborative efforts between students, faculty and WorkSpace. Please contact WorkSpace at 541-737-4197 or [workspace@oregonstate.edu](mailto:workspace@oregonstate.edu) for information.

## **Expectations for Student Conduct:**

Students are expected to conduct themselves in the course (e.g., on discussion boards, email postings) in compliance with the [university's regulations regarding civility](#).

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Students will be expected to treat all others with the same respect as they would want afforded themselves. Disrespectful behavior to others (such as harassing behavior, personal insults, inappropriate language) or disruptive behaviors in the course (such as persistent and unreasonable demands for time and attention both in and out of the classroom) is unacceptable.

## Ground Rules for Online Communication & Participation:

- Online threaded discussions are public messages, and all writings in this area will be viewable by the entire class or assigned group members. The discussion board is your space to interact with your colleagues related to current topics or responses to your colleague's statements. If you prefer that only the instructor sees your communication, send it to me by email, and be sure to identify yourself and the class. It is expected that each student will participate in a mature and respectful fashion.
- Participate actively in the discussions, having completed the readings and thought about the issues.
- Pay close attention to what your classmates write in their online comments. Ask clarifying questions, when appropriate. These questions are meant to probe and shed new light, not to minimize or devalue comments. Think through and reread your comments before you post them.
- Disagree with ideas, but do not make personal attacks. Do not demean or embarrass others. Do not make sexist, racist, homophobic, or victim-blaming comments at all.
- Be open to be challenged or confronted on your ideas or prejudices.
- Posting of personal contact information is discouraged (e.g. telephone numbers, address, personal website address).
- Observation of "Netiquette": All your online communications need to be composed with fairness, honesty and tact. Spelling and grammar are very important in an online course. What you put into an online course reflects on your level of professionalism. Here are a couple of references that discuss
  - writing online: <http://goto.intwg.com/>
  - netiquette: <http://www.albion.com/netiquette/corerules.html>.
- Please check the Announcements area and the course syllabus before you ask general course "housekeeping" questions (i.e. how do I submit assignment 3?). If you don't see your answer there, then please contact me.

## Contacting the Instructor

I can be contacted anytime at [neil.bell@oregonstate.edu](mailto:neil.bell@oregonstate.edu). I can also be contacted by phone in one of the two Extension offices in which I work. Typically, you can reach me in the Marion County Extension office in Salem, OR on Monday and Thursday from 9am-2pm Pacific Time at 503-361-2671. On Wednesday and Friday I can be reached in

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the Polk County Extension office in Dallas, OR from 9am to 2pm Pacific Time at 503-623-8395. I will also monitor the discussion board daily for enquiries.

**Technical Assistance:** If you experience errors or problems while in your online course, contact WorkSpace at 547-737-4197 or [workspace@oregonstate.edu](mailto:workspace@oregonstate.edu).