

Syllabus: Plant Pathology 501

Biology and Control of Plant Diseases

Course Instructor:

Emily Gatch

Course Communication:

- General course questions should be submitted to the "Questions for the Instructor" forum located in Class Discussions.
- Read the **Instructor Interaction** section in this syllabus for more details about course communications.
- Select the Course Tools link to see which communication tools your instructor is using for this course.
- Instructor email: ewgatch@wsu.edu

Text and Resources:

Essential Plant Pathology, 2nd edition, by G. I. Schumann and C. J. D'Arcy, 2009. ISBN 9780890543818

Required supplemental readings: available via PI P 501 Blackboard website

Course Overview

The course introduces the basic concepts of plant disease biology and control, covering disorders caused by fungi, viruses, bacteria, and nematodes, as well as the role of environmental factors (including temperature, moisture, and others) in contributing to the development of epidemics. Upon completion, students will be able to find, interpret, and use scientific literature on plant diseases and discuss a range of control strategies suitable for both traditional and organic growers.

Guiding Course Questions

- *How do biotic and environmental factors interact to provide conditions suitable for epidemics of plant diseases?*
 - *How is scientific information on these factors used to devise effective, sustainable practices for controlling plant diseases?*
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Course Synopsis

Plant diseases are major constraints in the production of food and other crops. The effective control of plant diseases requires understanding the biology of plant diseases and the factors conducive to their development. This course introduces students to basic concepts regarding the biology of plant pathogens, the role of environmental conditions in promoting development of plant diseases, and the development of effective approaches to disease control. At the end of the course, students will be able to find, interpret, and apply scientific information on plant diseases to make management decisions. The course is suitable for students interested in both conventional and organic agriculture.

- Unit I: Introduction to basic concepts, terminology, and the scientific literature on plant diseases.
 - Unit II: Biology and control of plant diseases caused by fungi.
 - Unit III: Biology and control of plant diseases caused by viruses, bacteria, and nematodes.
 - Unit IV: Epidemiology and control of plant diseases; anticipated future trends and the role of plant pathology and agriculture in global society.
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Course Goals/Student Learning Outcomes

Students will:

1. Understand basic life and/or disease cycles relevant to major pathogen groups (fungi, viruses, bacteria, and nematodes).

2. Understand basic concepts regarding disease cycles and terminology in plant pathology.
 3. Be able to find, interpret, and use information on plant diseases and control.
 4. Understand basic approaches (resistance, exclusion, chemical control, environmental manipulation, and using disease forecasting) for controlling plant diseases.
 5. Be able to incorporate understanding of the biology and control of plant diseases into developing economically and environmentally sustainable agricultural practices.
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Course Work

Details of course work is located in Lessons to the left of the screen. All due dates for assignments, discussions, and exams are located in the Course Schedule, also to the left of the screen.

- 11 Case Studies
- 4 Exams
- Online Discussions

General Format: Listening to lectures, working on a case study and accompanying online discussions in which students will build on course content to develop facility with the material and practice applying the information to real-world situations.

Exams: There are four online exams, none of which are proctored. You may use your textbook and the internet. The exams will be released to you at the appropriate time (check the Course Schedule to the left of this page) and you will access them in Assessments (also to the left of this page).

Instructor Interaction

The Instructor plans to access the web site daily, and at least once on the weekend. The Instructor will strive to post grading information as quickly as possible. To allow flexibility, points earned for threaded discussions and exam points will be posted within 1 week of the completion date.

Late Work Policy

Credit will not be given for late assignments except by prior consent of the instructor.

Grading

Course Work	Points	Percent
11 Case Studies @ 20 points each	220	33.85
Exam I	50	7.69
Exam II	150	23.08
Exam III	120	18.46
Exam IV	50	7.69
Online Discussions	60	9.7
Total	650	~100

95-100 A
 90-94 A-
 86-89 B+
 83-85 B
 80-82 B-
 76-79 C+
 73-75 C
 70-72 C-
 66-69 D+
 60-65 D
 0-59 F

Online Discussion Participation Rubric

Criteria	Unsatisfactory	Satisfactory	Exemplary
Quantity and timeliness	<p>First post submitted late in the session and/or does not submit at least one peer response by the end of the session.</p> <p>3 points</p>	<p>Submitted at least one initial post and at least one peer response by the end of the session.</p> <p>8 points</p>	<p>Submitted one initial response post early in the session, and one or more peer responses by the end of the session.</p> <p>15 points</p>
Spelling and mechanics	<p>Posts were not written using complete sentences, or two or more of the complete sentences are grammatically incorrect and/or have more than two spelling errors.</p> <p>3 points</p>	<p>Submitted posts with one or more grammatically incorrect sentences and/or two spelling errors.</p> <p>8 points</p>	<p>Submitted posts with grammatically correct sentences without any spelling errors.</p> <p>15 points</p>

Demonstrated knowledge of and content and applicability to professional practice	Posts and responses showed little evidence of knowledge and understanding of course content and applicability to professional practice. 3 points	Posts and responses showed evidence of knowledge and understanding of course content and applicability to professional practice. 8 points	Posts and responses showed evidence of knowledge and understanding of course content and applicability to professional practice, and included other content and resources that extended the learning of the community. 15 points
Generated learning within the community	Posts did not attempt to elicit responses and reflections from other learners and/or responses did not build upon the ideas of other learners to increase the depth of discussions. 3 points	Posts attempted to elicit responses and reflections from other learners and responses build upon the ideas of other learners to increase the depth of discussions. 8 points	Posts elicited responses and reflections from other learners and responses built upon and integrated multiple views from other learners to increase depth of discussions. 15 points

Total possible points from discussion = 60 points. Adapted from Northern Arizona University E-learning Center

Incomplete Grade Policy (Academic Rule 90h)

Incompletes are granted only with permission of the instructor and are subject to the following guidelines:

1. Students must request an incomplete in writing or by e-mail from the instructor before the end of the semester.
2. The request must be signed and dated by the student (or identified by student's e-mail address), and must explain the reasons behind the request for the incomplete.
3. In order to be considered for an incomplete, **there are two main conditions:**

1. A student must complete a minimum amount of the assigned course work. Specifically, a student must complete 75 percent of the course work.
 2. A student must have a mathematical possibility of passing the class. A passing grade is 60 percent or above for the entire course.
4. If extraordinary circumstances (e.g., family emergency, serious illness) are involved and are documented to the instructor's satisfaction, the professor/ instructor retains the discretion to grant an incomplete even if the minimum conditions outlined in item 3 above are not met.
- If an incomplete is granted, the standard WSU policy applies (i.e., ALL work must be completed within one full year from the end of the enrollment semester at issue, unless a shorter time is specified by the instructor. Otherwise, an automatic grade of "F," or failing, will be entered on the student's transcript).
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Course Schedule

For all course due dates please view the course schedule

Academic Regulations

Students enrolled in online courses are subject to the same University academic regulations as on-campus students. For the most accurate and up to date information go to <http://registrar.wsu.edu/academic-regulations/>.

Student Privacy

As a University student, you have legal rights under the Family Educational Rights and Privacy Act (FERPA) for protection of your academic records. For a complete explanation of these rights, visit the URL associated with your home campus in the Academic Regulations section or <http://registrar.wsu.edu/ferpa>.

Credit Hour Equivalent

Academic regulation 27 <http://www.catalog.wsu.edu/General/AcademicRegulations/ListBy/27> . Academic credit is a measure of the total minimum time commitment required of a typical student in a specific course. For the WSU semester system, one semester credit is assigned for a minimum of 45 hours.

Academic Integrity

Academic integrity is the cornerstone of higher education. As such, all members of the university community share responsibility for maintaining and promoting the principles of integrity in all activities, including academic integrity and honest scholarship. *Academic integrity will be strongly enforced in this course. Violation of WSU's Academic Integrity Policy (identified in Washington Administrative Code (WAC) 504-26-010(3) and -404) may result in penalties up to and including failing the assignment, exam, quiz, course requirement, or the course itself and students will not have the option to withdraw from the course pending an appeal, and will be reported to the Office of Student Conduct.*

Cheating includes, but is not limited to, plagiarism and unauthorized collaboration as defined in the Standards of Conduct for Students, WAC 504-26-010(3). You need to read and understand all of the definitions of cheating: <http://app.leg.wa.gov/WAC/default.aspx?cite=504-26-010>. If you have any questions about what is and is not allowed in this course, you should ask course instructors before proceeding.

If you wish to appeal a faculty member's decision relating to academic integrity, please use the form available at conduct.wsu.edu. Also, if you wish to report a violation of WSU's academic integrity policies, please contact the Office of Student Conduct at 509-335-4532 or conduct@wsu.edu

COPYRIGHT

Any course-related materials, presentations, lectures, etc. are the instructor's intellectual property and may be protected by copyright. The use of University electronic resources for commercial purposes, including advertising to other students to buy notes, is a violation of WSU's computer abuses and theft policy (WAC 504-26-218).

Online Collaboration

The essence of education is exposure to diverse viewpoints. In your discussion posts you'll meet students with vastly different opinions and backgrounds. When you don't agree with their views, pause a moment. Weigh their words. You're encouraged to disagree with the substance of others' ideas and opinions, but do so with an active sense of respect for one another, and without losing focus on the topic at hand. Personal attacks, inflammatory statements, flaming, trolling, and disruption of the discussion do not have a place in academic discourse.

Your instructors will promote high-quality academic discussions by removing any posts they view as disruptive of the educational process and alerting students whose posts have been removed that they have violated course expectations. Students who continue to misuse the discussion boards after a warning may be subject to removal of access rights, course failure, and referral to the Office of Student Conduct.

Postings must comply with University policy on use of computing resources, including those regarding harassment and discrimination, as well as conform to the Standards of Conduct for Students. Students are encouraged to review the Standards, particularly WAC 504-26-218, 504-26-220, and 504-26-222. Visit the University Website specific to your campus of enrollment for more information.

In certain courses, assessment of discussion posts is part of the final grade. Criteria for evaluating your discussion participation will be explained elsewhere in the course space, if applicable.

Netiquette

Just as in a physical classroom, a good discussion in an online classroom depends on everyone feeling safe and respected. Here are a few tips for creating an educational and enjoyable discussion space:

- It is difficult to “read” emotion in online discussions – be clear, use emoticons or concisely express your feelings (e.g., "ha, ha")
- Use of all capitals sends the message that YOU ARE SHOUTING!
- Give positive feedback (“good idea, thanks”), be polite, and avoid hostile or curt comments, stereotypes and labels.
- Apply the same standards you would follow in a face-to-face classroom discussion.
- Maintain a sense of dignity and decorum (an online class is not the same as your Facebook account or your email).
- Argue not with emotion but with knowledge, facts, authority and reason.

For more on the Core Rules of Netiquette, visit <http://coursedesign.colostate.edu/obj/corerulesnet.html>

Critical Thinking

The ability to think and write critically is an essential skill in many walks of life. Critical thinking skills are developed and refined through practice, self-reflection, and the critique and support of peers and instructors. Throughout this course you will have many opportunities to exercise your analytical thinking, synthesize information, and apply knowledge to real-life situations.

The course developer or your instructor may have provided a critical thinking rubric in this course space, if applicable, to assess your own writing and that of other students. Please review it carefully before completing each activity.

Reasonable Accommodations

Reasonable accommodations are available in online classes for students with a documented disability. All accommodations must be approved through your WSU Disability Services office. If you have a disability and need accommodations, we recommend you begin the process as soon as possible.

For more information contact a Disability Specialist on your home campus:

- Global Campus <http://accesscenter.wsu.edu/students/global-campus-students/>
 - Pullman: 509-335-3417 <http://www.accesscenter.wsu.edu>, Access.Center@wsu.edu
 - Spokane: <https://spokane.wsu.edu/studentaffairs/disability-resources/>
 - Tri-Cities: <http://www.tricity.wsu.edu/disability/>
 - Vancouver: 360-546-9138 <http://studentaffairs.vancouver.wsu.edu/student-resource-center/disability-services>
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Technical Support

If you need technical assistance, please select the **Course Information** link in the course menu, then select **Technical Support**.

WSU Online Student Support

The WSU Online Web site (<http://online.wsu.edu/currentStudent/Default.aspx>) has all the non-content and administrative related information you need to be a successful online learner.

- If you need help but aren't sure who to contact, the Student Services Office is here to help! See [Student Services](#).
 - [Study tips](#) and [Skills for success](#) are also available to resources that will give you a good head start in assuring success with your course.
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Library Support

All students enrolled in Washington State University online courses can use the WSU Libraries online databases and receive reference and research assistance from their home campus. Students can also borrow books and other circulating material as well as access full-text journal articles.

- General Library Links by Campus
 - Pullman: <http://libraries.wsu.edu>
 - Global Campus: <http://libguides.libraries.wsu.edu/global>
 - Vancouver: <http://library.vancouver.wsu.edu/>
 - Tri-Cities: <http://tricity.wsu.edu/library>
 - Spokane – Riverpoint and Nursing at Yakima: <https://spokane.wsu.edu/library/>
 - College of Nursing: <http://nursing.wsu.edu/Libraries-&-Resources/index.html>
 - [Review the Libraries' Online Information for more guidance.](#)
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eTutoring

As a WSU student enrolled in an undergraduate course, you have **FREE unlimited** access to eTutoring.org, a tutoring platform that enables students and tutors to collaborate in an online environment. This is not a course requirement, but simply an available resource that you may utilize as needed. With three ways to access a tutor you can choose the one that best fits your needs.

- Writing Lab tutors will respond to papers in ANY academic subject, including history, anthropology, sociology, and everything else. If you're working on a paper for ANY of your courses our tutors can help you. Just submit your paper, ask specific questions on the submission form and a tutor will respond within 24-48 hours.
- eChat rooms allow students to meet with tutors in one-on-one tutoring sessions via a fully interactive, virtual online environment.

- Students can also leave specific questions for an eTutor in any of our subjects by taking advantage of our eQuestions option. Our tutors will respond to your question within 24-48 hours.

The list of available tutoring subjects can be found on

the <https://www.etutoring.org/login.cfm?institutionid=176&returnPage=> site. Current subjects include Accounting, Anatomy & Physiology, Biology, Chemistry, Math and Calculus, Medical Coding, MS Office 2007, Physics, Spanish, Statistics, Web Development and Writing!

Academic Calendar

Please review the current Academic Calendar to become familiar with critical deadlines on your campus. Visit the WSU Academic Calendar page: <http://registrar.wsu.edu/academic-calendar/> and select your home campus from the drop down menu.

Campus Safety

Classroom and campus safety are of paramount importance at Washington State University, and are the shared responsibility of the entire campus population. WSU urges students to follow the “**Alert, Assess, Act**” protocol for all types of emergencies and the “**Run, Hide, Fight**” response for an active shooter incident.

Remain **ALERT** (through direct observation or emergency notification), **ASSESS** your specific situation, and **ACT** in the most appropriate way to assure your own safety (and the safety of others if you are able).

Please sign up for emergency alerts on your account at [MyWSU](#). For more information on this subject, campus safety, and related topics, please view the [FBI's Run, Hide, Fight video](#) and visit the [WSU safety portal](#).