

Biology 4218A – Plant Pathology Course Outline

1. Course Information

Course Information

Biology 4218A Plant Pathology – Fall Term 2023

List of Prerequisites

The prerequisite for this class is Biology 3218F/G.

Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

2. Instructor Information

Course coordinator	Email	Office	Phone	Office Hours
Prof. Thomas A. DeFalco	tdefalc@uwo.ca	NCB404	x81475	By Appointment

If you are contacting your instructor, please use your Western (@uwo.ca) email address and include “Bio4218A” in the subject line. Office hours may be held on Zoom or in-person. Please email the instructor to arrange an appointment or inquire in class.

3. Course Syllabus, Schedule, Delivery Mode

Course description and list of topics

Biology 4218A is a lab course on plant pathology. The general areas of study are listed below, check the OWL site for specific dates and reading lists.

Lecture topics and dates are on the OWL site.

Learning objectives

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

- Explain what is meant by phytopathology through theoretical (lecture) and practical (laboratory) learning experiences.
- Demonstrate the ability to identify disease symptoms and signs (both biotic and abiotic) in living plant material.
- Identify and describe organisms that cause plant diseases from the following groups:

Virus, Bacteria, Protozoa, Fungi, Nematodes, Plants.

- Understand how the infection process works, disease develops and spreads.
- Understand Koch's Postulates and the Disease Triangle.
- Understand the mechanisms of plant defense and immunity against disease-causing pathogens and pests.
- Demonstrate a knowledge of the methods used to control pathogens, including cultural, breeding, regulatory and chemical.
- From the Laboratory portion of the course students should be able to define, describe and identify example pathogens, recognize their symptoms and signs and their pathogenesis.

Key sessional dates

First class: Sept 7, 2023

Fall study break: Oct 30-Nov 5, 2023

Last class: Dec 7, 2023

Contingency plan for an in-person class pivoting to 100% online learning

Instruction will take place in-person. In the event of a COVID-19 resurgence during the course that necessitates the course delivery moving away from face-to-face interaction, affected course content will be delivered entirely online synchronously (i.e., at the times indicated in the timetable). The grading scheme will **not** change. Any remaining assessments will also be conducted online as determined by the course instructor.

4. Course Materials

Texts/materials

Essential Plant Pathology by Schuman and D'Arcy 2nd Edition (2010). Available as an ebook from the publisher. A hardcopy will also be reserved on 2-hour loan at Taylor Library.

<https://doi.org/10.1094/9780890546710>

Additional readings/texts will be suggested throughout the course.

Course Website

All course material, including additional readings, will be posted on the Biology 4218A OWL site. Students are responsible for checking the course OWL site (<http://owl.uwo.ca>) on a regular basis for news and updates. This is the primary method by which information will be disseminated to all students in the class.

If students need assistance with the course OWL site, they can seek support on the OWL Help page. Alternatively, they can contact the Western Technology Services Helpdesk. They can be contacted by phone at 519-661-3800 or ext. 83800.

Technical Requirements

In case of shift to on-line delivery, students will require:

- Stable internet connection
- Laptop or desktop computer
- Working microphone
- Working webcam

5. Methods of Evaluation

The overall course grade (out of 100) will be calculated as listed below:

Component	Details	Value (%)
Assignment	Due Oct 27 (via Zoom)	10
Labs	Weekly mini-reports	35
Lab exam	Practical lab evaluation (tentatively Dec 7)	15
Final exam	TBD	40

Laboratory attendance is mandatory for credit in this course.

Late assignments be assessed a penalty of 10% of the assigned grade. Assignments will be accepted until marked assignments are returned to the class. Since this is generally more than 48-72 hours past the assigned due date, no alternative assessments will be available. Outstanding assignments beyond the point that graded assignments are returned to the class will be assigned a grade of zero (0).

6. Student Absences

If you are unable to meet a course requirement due to illness or other serious circumstances, please follow the procedures below.

Assessments worth 10% or more of the overall course grade:

For work totalling 10% or more of the final course grade, you must provide valid medical or supporting documentation to the Academic Counselling Office of your Faculty of Registration as soon as possible. For further information, please consult the University's medical illness policy at

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf.

The Student Medical Certificate is available at

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf.

Absences from Final Examinations

If you miss the Final Exam, please contact the Academic Counselling office of your Faculty of Registration as soon as you are able to do so. They will assess your eligibility to write the Special Examination (the name given by the University to a makeup Final Exam).

You may also be eligible to write the Special Exam if you are in a “Multiple Exam Situation” (e.g., more than 2 exams in 23-hour period, more than 3 exams in a 47-hour period).

6. Accommodation and Accessibility

Religious Accommodation

When a course requirement conflicts with a religious holiday that requires an absence from the University or prohibits certain activities, students should request accommodation for their absence in writing at least two weeks prior to the holiday to the course instructor and/or the Academic Counselling office of their Faculty of Registration. Please consult University's list of recognized religious holidays (updated annually) at

<https://multiculturalcalendar.com/ecal/index.php?s=c-univwo>.

Accommodation Policies

Students with disabilities are encouraged to contact Accessible Education, which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The policy on Academic Accommodation for Students with Disabilities can be found at:

[https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic Accommodation_disabilities.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic_Accommodation_disabilities.pdf).

7. Academic Policies

The website for Registrarial Services is <http://www.registrar.uwo.ca>.

In accordance with policy,

https://www.uwo.ca/univsec/pdf/policies_procedures/section1/mapp113.pdf,

the centrally administered e-mail account provided to students will be considered the individual's official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at their official university address is attended to in a timely manner.

No electronic devices will be permitted for quizzes or exams.

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:

http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf.

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All

papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (<http://www.turnitin.com>).

Tests and examinations in this course may be conducted using a remote proctoring service. By taking this course, you are consenting to the use of this software and acknowledge that you will be required to provide **personal information** (including some biometric data) and the session will be **recorded**. Completion of this course will require you to have a reliable internet connection and a device that meets the technical requirements for this service. More information about this remote proctoring service, including technical requirements, is available on Western's Remote Proctoring website at:

<https://remoteproctoring.uwo.ca>.

8. Support Services

Please visit the Science & Basic Medical Sciences Academic Counselling webpage for information on adding/dropping courses, academic considerations for absences, appeals, exam conflicts, and many other academic related matters: <https://www.uwo.ca/sci/counselling/>.

Students who are in emotional/mental distress should refer to Mental Health@Western (<https://uwo.ca/health/>) for a complete list of options about how to obtain help.

Western is committed to reducing incidents of gender-based and sexual violence and providing compassionate support to anyone who has gone through these traumatic events. If you have experienced sexual or gender-based violence (either recently or in the past), you will find information about support services for survivors, including emergency contacts at

https://www.uwo.ca/health/student_support/survivor_support/get-help.html.

To connect with a case manager or set up an appointment, please contact support@uwo.ca.

Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Accessible Education at

http://academicsupport.uwo.ca/accessible_education/index.html

if you have any questions regarding accommodations.

Learning-skills counsellors at the Student Development Centre (<https://learning.uwo.ca>) are ready to help you improve your learning skills. They offer presentations on strategies for improving time management, multiple-choice exam preparation/writing, textbook reading, and more. Individual support is offered throughout the Fall/Winter terms in the drop-in Learning Help Centre, and year-round through individual counselling.

Additional student-run support services are offered by the USC, <https://westernusc.ca/services/>.