1 Course Details

1.1 Calendar Description

This is an interdisciplinary course on the nature and importance of diseases, insects and abiotic stresses on plant productivity and quality. A case history approach will be used to illustrate the biology of plant pests, the principles of pest population management, and related topics.

**Pre-Requisites:**

BIOL*1040 or (2 of BIOL*1050, BIOL*1070, BIOL*1080, BIOL*1090)

**Equates:**

ENVB*2040

1.2 Course Description

Plant Health and the Environment provides an overview on how plants are important for humans and the environment. It also focuses on how different pests, diseases and environmental conditions can cause major problems not only for the environment per se, but also for our lives and society. A diverse selection of local and global plant health problems and the challenges associated with their control and management are covered using a case study approach.

1.3 Timetable

Lectures: Mondays, Wednesdays and Fridays 08:30 AM – 09:20 AM ET.

Note: Classes will be delivered virtually (synchronous) for the first two weeks, then will be delivered in-person. There is some uncertainty surrounding the extent to which it may be necessary to continue a virtual format for the lectures. You will be informed of any changes to the course outline as needed via CourseLink.

In general, lecture slides and any supplemental material will be posted on CourseLink prior to or shortly following the relevant lecture.
1.4 Final Exam

There will NOT be a Final Exam in this course.

2 Instructional Support

2.1 Instructional Support Team

| Instructor: | Coralie (Cora) Sopher |
| Email: | coralie.sopher@uoguelph.ca |
| Office Hours: | Email is the best way to contact the instructor and answers are typically provided within 48h. All electronic communications should be done using your UofG email address. Please include "ENVS*2040" in the subject line. |

Online appointments via Zoom or in-person (as allowed) can be arranged.

An online Discussion forum is set up in CourseLink for you to ask your instructor/TAs questions. Often, other classmates have similar questions and you may wish to view these.

2.2 Teaching Assistants

| Teaching Assistant (GTA): | Jason Lemay |
| Email: | jlemay@uoguelph.ca |
| Office Hours: | Please contact Jason via email to address any questions or concerns with an assignment if he has been assigned to mark that. |

| Teaching Assistant (GTA): | Busayo Kodaolu |
| Email: | bkodaolu@uoguelph.ca |
| Office Hours: | Please contact Busayo via email to address any questions or concerns with an assignment if she has been assigned to mark that. |

| Teaching Assistant (GTA): | Serge Levesque |
| Email: | serge@uoguelph.ca |
| Office Hours: | Please contact Serge via email to address any questions or concerns with an assignment if he has been assigned to mark that. |

3 Learning Resources
3.1 Required Resources

Required resources (Textbook)
There is no required textbook for this course.

3.2 Additional Resources

CourseLink (Website)
https://courselink.uoguelph.ca
The instructor will post announcements, select slides from lectures, readings, videos and other material that will enhance your understanding of the course content on CourseLink. All course materials made available through CourseLink and all items covered during lectures (virtual and in class) are considered required, unless the instructor explicitly indicates otherwise. Please check the CourseLink site often (daily is recommended).

Course delivery format (Software)
The course will begin with lectures being delivered synchronously via Zoom through CourseLink, which you can link to via the Zoom tab in the navigation bar. Please make sure you have a Zoom account and the system requirements to run Zoom.

4 Learning Outcomes

4.1 Course Learning Outcomes
By the end of this course, you should be able to:
1. value the importance of plants for our society by analyzing the historical and current significance of pest, disease and environment-related issues.
2. summarize life histories for selected disease pathogens and insect pests and evaluate their significance in horticultural, agricultural and forest environments.
3. examine the challenges faced and methods used in the management of plant pathogens, pests and other plant-related problems.
4. effectively communicate ideas and information in oral and written formats, while demonstrating an advanced understanding of the relevant scientific terminology.
5. critically evaluate scientific literature regarding plant-related issues and effectively construct and communicate a personal fact-based argument.
5 Teaching and Learning Activities

5.1 Lecture

Topics:

Lecture topics may include the following and are subject to change:

- General importance of plants, including those related to biofuels, climate change, wetlands, erosion effects and food security.

- Insects as pests including some basic entomology.

- An introduction to plant diseases and disease case studies such as crown gall, late blight, ergot of rye, South American leaf blight, coffee rust and fairy ring.

- Pest and disease management including an introduction to integrated pest/disease management, biological control, genetically modified crops (plants with novel traits) and pesticide resistance.

- Insect case studies such as the emerald ash borer, Swede midge, multicolored Asian lady beetle, mountain pine beetle and spotted winged Drosophila.

- Abiotic disorders, weeds, nematodes and parasitic plants.

6 Assessments

6.1 Marking Schemes & Distributions
### 6.2 Assessment Details

**Essay (25%)**
- **Due:** Thu, Feb 10, 9:00 PM, Submitted to the Dropbox
- **Learning Outcome:** 1, 2, 3, 4, 5
  - Instructions for the Essay assignment are available under the Assessments tab in CourseLink. Available topics will be released Wednesday January 12 at 10:00 AM ET under the Groups tab in the Navbar in CourseLink. You will need to sign up for one, which will be on a first-come, first-served basis.

**Midterm Examination I (25%)**
- **Date:** Fri, Mar 4, 8:30 AM, In class
- **Learning Outcome:** 1, 2, 3
  - It will take place during the regular lecture period and you will have 50 minutes to complete that. If the course continues to be delivered virtually on March 4, the exam will be delivered virtually in CourseLink via the Quizzes tool and additional instructions will be provided. If the Midterm is delivered virtually, Respondus Lockdown Browser will not be used.
  
  The Midterm Exam will cover all material covered in the course, including any guest lectures, up to and including the lecture on March 2. The Midterm Exam is closed-book and must be completed by yourself, without any aids, for example, you are not allowed to use a calculator, phone, notes or the help of anyone else. The Midterm Exam will not be returned and questions/answers will not be posted after they are completed. However, you can contact the instructor regarding your exam.

**Case study assignment (25%)**
- **Due:** Thu, Mar 17, 9:00 PM, Submitted to the Dropbox
- **Learning Outcome:** 1, 2, 3, 4
  - Instructions for the Case Study assignment are available under the Assessments tab in CourseLink. Available topics will be released Wednesday January 12 at 10:00 AM ET under the Groups tab in the Navbar in CourseLink. You will need to sign up for one, which will be on a first-come, first-served basis.

**Midterm Examination II (25%)**
- **Date:** Thu, Apr 1, 8:30 AM, In class
- **Learning Outcome:** 1, 2, 3
  - Midterm II will take place during the regular lecture period and you will have 50 minutes to...
complete that. If the course continues to be delivered virtually on April 1, the exam will be delivered virtually in CourseLink via the Quizzes tool and any additional instructions will be provided. If the Midterm is delivered virtually, Respondus Lockdown Browser will not be used.

Midterm II is not cumulative and will cover all materials covered in the course since Midterm II, including any guest lectures, up to and including the lecture on March 30. The Midterm Exam is closed-book and must be completed by yourself, without any aids, for example, you are not allowed to use a calculator, phone, notes or the help of anyone else. The Midterm Exam will not be returned and questions/answers will not be posted after they are completed. However, you can contact the instructor regarding your exam after you have received your final course grade. Your mark/assessment details for this exam can not be released prior to your final course grade being released.

**Bonus Assignment (Optional) (0%)**

*Due: Thu, Apr 8, 9:30 AM, Submitted to the Dropbox as applicable*

**Learning Outcome:** 4, 5

You can obtain up to five bonus marks added to your final course mark by completing one of several options described under the Assessments tab in CourseLink. Please note that you can not receive a final grade above 100% in the course.

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### 7 Course Statements

#### 7.1 Grading Policies

The essay and case study assignment are to be submitted online via CourseLink to the Dropbox by **9 PM ET** on the due date. Late assignments will be penalized 10% of the total marks available for the assignment per day or part thereof, including weekend-days, and will no longer be accepted five days after the due date (i.e., not accepted after 9:00 PM ET February 15 for the essay and 9:00 PM ET March 22 for the case study), resulting in a mark of zero for the assignment. The bonus (optional) assignment will not be accepted after the due date (April 8 at 9:30 AM). If you have an illness or other issue that prevents you from submitting an assignment on time please contact your instructor or program counselor, as applicable, prior to the due date.

There are no alternate times for writing the Midterm Exams. Requests for academic consideration because of an illness or compassionate circumstances must be made in writing to the instructor prior to a Midterm date (March 4 and April 1). The normal accommodation for Midterm I is the transfer of marks to Midterm II. If a midterm exam is missed for a non-approved reason, a grade of zero for the missed examination will be assigned.
You can receive up to 5.0 bonus marks added to your final course grade by completing an optional assignment.

This course uses Turnitin, integrated with the CourseLink Dropbox tool, for all submitted assignments to detect possible plagiarism, unapproved collaboration or copying of others’ work.

7.2 Group work

Group work for marked assignments is not permitted, with the exception of the bonus assignment (see bonus assignment instructions for details).

8 University Statements

8.1 Email Communication

As per university regulations, all students are required to check their e-mail account regularly: e-mail is the official route of communication between the University and its students.

8.2 When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. The grounds for Academic Consideration are detailed in the Undergraduate and Graduate Calendars.

Undergraduate Calendar - Academic Consideration and Appeals
https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml

Graduate Calendar - Grounds for Academic Consideration
https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml

Associate Diploma Calendar - Academic Consideration, Appeals and Petitions
https://www.uoguelph.ca/registrar/calendars/diploma/current/index.shtml

8.3 Drop Date

Students will have until the last day of classes to drop courses without academic penalty. The deadline to drop two-semester courses will be the last day of classes in the second semester. This applies to all students (undergraduate, graduate and diploma) except for Doctor of Veterinary Medicine and Associate Diploma in Veterinary Technology (conventional and alternative delivery) students. The regulations and procedures for course registration are available in their respective Academic Calendars.
8.4 Copies of Out-of-class Assignments

Keep paper and/or other reliable back-up copies of all out-of-class assignments; you may be asked to resubmit work at any time.

8.5 Accessibility

The University promotes the full participation of students who experience disabilities in their academic programs. To that end, the provision of academic accommodation is a shared responsibility between the University and the student.

When accommodations are needed, the student is required to first register with Student Accessibility Services (SAS). Documentation to substantiate the existence of a disability is required; however, interim accommodations may be possible while that process is underway.

Accommodations are available for both permanent and temporary disabilities. It should be noted that common illnesses such as a cold or the flu do not constitute a disability.

Use of the SAS Exam Centre requires students to make a booking at least 14 days in advance, and no later than November 1 (fall), March 1 (winter) or July 1 (summer). Similarly, new or changed accommodations for online quizzes, tests and exams must be approved at least a week ahead of time.

For Guelph students, information can be found on the SAS website https://www.uoguelph.ca/sas

For Ridgetown students, information can be found on the Ridgetown SAS website https://www.ridgetownc.com/services/accessibilityservices.cfm

8.6 Academic Integrity

The University of Guelph is committed to upholding the highest standards of academic integrity, and it is the responsibility of all members of the University community-faculty, staff, and students-to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff, and students have the responsibility of supporting an environment that encourages academic integrity. Students need to remain aware that
instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

Undergraduate Calendar - Academic Misconduct
https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml

Graduate Calendar - Academic Misconduct
https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml

8.7 Recording of Materials
Presentations that are made in relation to course work - including lectures - cannot be recorded or copied without the permission of the presenter, whether the instructor, a student, or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

8.8 Resources
The Academic Calendars are the source of information about the University of Guelph’s procedures, policies, and regulations that apply to undergraduate, graduate, and diploma programs.

Academic Calendars
https://www.uoguelph.ca/academics/calendars

8.9 Disclaimer
Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings, changes in classroom protocols, and academic schedules. Any such changes will be announced via CourseLink and/or class email.

This includes on-campus scheduling during the semester, mid-terms and final examination schedules. All University-wide decisions will be posted on the COVID-19 website (https://news.uoguelph.ca/2019-novel-coronavirus-information/) and circulated by email.

8.10 Illness
Medical notes will not normally be required for singular instances of academic consideration, although students may be required to provide supporting documentation for multiple missed assessments or when involving a large part of a course (e.g., final exam or major assignment).
8.11 Covid-19 Safety Protocols

For information on current safety protocols, follow these links:

- https://news.uoguelph.ca/return-to-campuses/how-u-of-g-is-preparing-for-your-safe-return/
- https://news.uoguelph.ca/return-to-campuses/spaces/#ClassroomSpaces

Please note, these guidelines may be updated as required in response to evolving University, Public Health or government directives.