

**Department of Microbiology and Immunology**  
**Biological and Social Determinants of Infectious Disease 3500B**

Course Syllabus for Winter 2025



Western University is committed to a **thriving campus**; therefore, your health and wellness matter to us! The following link provides information about the resources available on and off campus to support students: <https://www.uwo.ca/health/> Your course coordinator can also **guide you** to resources and/or services should you need them.

**1. Technical Requirements:**



Stable internet connection



Laptop or computer

**2. Important Dates:**



Classes Begin	Reading Week	Classes End	Study day(s)	Exam Period
January 6	February 15–23	April 4	April 5–6	April 7–30

March 31, 2025: Last day to withdraw from second-term half course without academic penalty

**3. Contact Information**

Course Coordinator	Contact Information

Instructor(s) or Teaching Assistant(s)	Contact Information

#### 4. Course Description and Design

**Delivery Mode:** In-person

**Course Description:** This course provides a multidisciplinary approach to examine the introduction, spread and ecological impact of infectious diseases; the underlying biological and social determinants of infectious diseases with an emphasis on the effects of environment and socio-economic status; lessons learned from global pandemics; treatment/prevention of infectious diseases and challenges with implementation in under-resourced communities. This course has several local and external guest lecturers who are experts in their field.

**Course Prerequisite:** Microbiology and Immunology 2500A/B

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.

##### Timetabled Sessions

Component	Date(s)	Time
Lectures and Discussion Group Sessions		

- Asynchronous pre-work (video viewing and reading) must be completed prior to Discussion Group sessions
- Attendance at sessions is required
- Missed work should be completed within 24 hours

All course material will be posted to OWL: <https://westernu.brightspace.com/d2l/login>. Any changes will be indicated on the OWL site and discussed with the class.

If students need assistance, they can seek support on the [OWL Brightspace Help](#). Alternatively, they can contact the [Western Technology Services Helpdesk](#). They can be contacted by phone at 519-661-3800 or ext. 83800.

Current versions of all popular browsers (e.g., Safari, Chrome, Edge, Firefox) are supported with OWL Brightspace; what is most important is that you update your browser frequently to ensure it is current. All JavaScript and cookies should be enabled.

#### 5. Learning Outcomes

To instill an appreciation, awareness and understanding of:

- Global infectious diseases and the frailty of marginalized and economically poor human societies.
- Viral, bacterial, fungal and parasitic pathogens responsible for current and past global epidemics.
- The global impact of diarrheal diseases and their association with water management and treatment.
- Vector-borne illnesses and how elimination of the vector (e.g. mosquito) would harm our ecosystem.
- Treatment and prevention strategies available to combat many global infectious diseases, but addressing the difficulties of implementation and economic cost of epidemics.
- The current HIV epidemic and how the world is responding.
- How pathogens impact our food supply and lead to malnutrition, war and other diseases.
- How probiotics and the microbiome can displace and prevent various infectious pathogens.

## 6. Course Content and Schedule

Please refer to the Course Schedule published on OWL Brightspace.

## 7. Participation and Engagement

- Students are expected to participate and engage with content as much as possible
- For scheduled Discussion Group sessions, students can participate in-person or complete an alternative written assignment
- Students are expected to interact in the course online discussion forum with their peers and instructors

## 8. Assessment and Evaluation

Below is the evaluation breakdown for the course. Any deviations will be communicated.

Assessment	Format	Due Date	Weighting	Flexibility
Participation Mark			18%	Discussion Groups have a written assignment alternative
Newspaper Article			12%	72-hour no late penalty
Midterm Exam	Short answer exam		20%	Not applicable
Group Video	Video submission		25%	72-hour no late penalty
	Video grading			
Final Exam	Short answer exam		25%	Not applicable

**Designated Assessment:** Instructors are permitted to designate one assessment per course per term as requiring supporting documentation to receive academic consideration. See below for information on academic consideration policy and missed course work. For this course, the following assessment has been designated as requiring supporting documentation:

- Midterm Exam

### Information about flexibility in assessment

- Flexibility in assessment has been applied to this course; therefore, academic consideration requests may be denied on the assessments where flexibility is included.
- For the 5 scheduled Discussion Group sessions, students receive participation credit for attendance and in-person participation. Students that are not able to attend a scheduled session for any reason may elect to complete a written alternative assignment to receive the same credit.
- For the Newspaper Article, students may submit the assignment up to 72 hours after the due date with no penalty.
- Group Videos and Video grading assignments may be submitted up to 72 hours after the due date with no penalty.

## **General information about assessments**

- All assignments are due at 11:59 pm EST unless otherwise specified
- Students are responsible for ensuring that the correct file version is uploaded; incorrect submissions including corrupt files could be subject to late penalties (see below) or a 0
- Written assignments will be submitted to Turnitin (statement in policies below)
- Students will have unlimited submissions to Turnitin
- A student might not receive the same grade as their group members if it is determined that the distribution of work was not equal
- After an assessment is returned, students should wait 24 hours to digest feedback before contacting their evaluator; to ensure a timely response, reach out within 7 days
- Any grade appeals on assignments or midterms must be received within 3 weeks of the grade being posted.

## **Participation Marks:**

Marks are based on Discussion Groups and active participation on OWL Discussion forums (periodically, instructors will post questions on the OWL Discussion forum to initiate class discussion). Attendance and active participation in all five Discussion Group sessions is mandatory. Individuals that must miss a Discussion Group session will be provided with an alternative written assignment to receive credit for the session. Each new online discussion forum topic will be active for 10 days. Posts submitted after 10 days will not count toward participation.

## **Participation Mark breakdown:**

10% Discussion group sessions (2% x 5 sessions)

8% Online discussion forum

## **Midterm/Final Exam Format:**

Format is short answer questions. They cover material provided in lectures, discussion groups, assigned readings, OWL discussion forum, and student videos.

Please arrive outside the test room early. **No calculators, phones or other electronic devices are permitted during tests.** Your desk must be bare except for student ID card, pencil and eraser. Be aware that answers will be compared to those of other students for evidence of cheating.

**Missed Midterm Policy.** There will be one makeup midterm exam scheduled for students with approved and documented reasons for missing the regular midterm. If you miss the makeup midterm for an approved and documented reason, then you will write a more comprehensive final exam that includes material tested on the midterm.

## **Newspaper Article Critique:**

The purpose of this assignment is two-fold: first, to research an important and underappreciated topic related to the biological, social, and economic determinants of infectious disease; and second, to critically evaluate AI-generated reporting on this topic. In this assignment, you will choose a topic related to the themes of this course and ask ChatGPT to write a newspaper article on this topic. You will then write a critique of the AI-generated article. Please refer to the 'Newspaper Article Critique Assignment' document on OWL Brightspace. The assignment will be assessed for plagiarism using Turnitin.

### **Student Group Video:**

**Video Selection.** In class, students will be assigned to groups (random member assignment) and given a list of possible topics. Each group will then have an opportunity to collectively select a video topic from a list of choices.

**Video Format.** Each group will generate a 10-15 minute video (15 minute maximum) on their topic. Students must interview *at least one* expert on their topic, plus incorporate current information in reliable media and/or publication sources. With exception of topics related to London, Ontario, at least one expert must reside/work outside of the City of London, Ontario. International experts are strongly encouraged but not required. Each group member must appear either visibly or verbally as a presenter in the video – it is essential that each presenter is identifiable (for marking purposes), so state your name clearly verbally and/or as text in the video. Credits that highlight each student and their contribution to the video must be stated at the end of each video.

Videos will be posted on a secure UWO-based online video site for viewing and grading by **all** course members. You will not grade your own video.

Each group will provide the class with **two** potential final exam questions on their topic. These are due at the same time as the video. Questions from this bank will be selected (and possibly revised) for inclusion on the final exam.

### **How to Approach and Interview an Expert:**

1. Do your research first, then select 1-3 experts in the field. Choose the most influential expert(s) (i.e. depending on the video topic, international experts may be more credible than local experts).
2. Prepare the interview questions in advance.
3. Email or call the person(s) and explain the assignment. Ask them if they are agreeable to you recording/videoing the interview. Inform them that the video will be posted on a secure course site so it will be exclusive to the course participants. Set a congenial time and place for the interview via Zoom, etc. or in person. Provide them with the interview questions in advance.

**Video Grading:** Each member of the group will be given a mark based on:

- |     |  |
|-----|--|
| 2%  | View and provide grades for all group videos (except your own).  |
| 8%  | Quality of presenters in the video – speaking clearly, slowly, etc. All persons within a group must be identifiable within the video by audio or visual and must be introduced by name. Any exceptions must be approved by the course instructor. Contribution to presenting the summary of the video and answering questions posed during class or posted on the OWL forum is included. |
| 15% | Quality of the video, which includes the quality of the expert(s) interviewed, as ranked by course members. <i>Notably, TA and Instructor rankings will be weighted higher than student rankings.</i>  |

**Student Group Video Expectations.** Each member of the group is expected to participate and *contribute equally* in the creation of the video. The Course Coordinator must be notified immediately in the event that a student within the group is not participating equally in its creation. This will lead to a one-on-one meeting between the student and the course coordinator(s) for resolution and a participation mark penalty to be determined by the course coordinators.

In the event that a student is unable to participate in its entirety, or in part, of the creation of the video due to illness or other reason approved by Academic Counselling, the course coordinators will determine a suitable resolution. This may involve an oral presentation given by the student to the course coordinators/TAs on their designated material or an essay.

**Example Videos.** We will make several example videos available via a secure UWO-based video site to be announced.

### **Additional Information on Evaluations:**

Click [here](#) for a detailed and comprehensive set of policies and regulations concerning examinations and grading. The table below outlines the University-wide grade descriptors.

A+	90-100	One could scarcely expect better from a student at this level
A	80-89	Superior work which is clearly above average
B	70-79	Good work, meeting all requirements, and eminently satisfactory
C	60-69	Competent work, meeting requirements
D	50-59	Fair work, minimally acceptable
F	below 50	Fail

### **Information about late or missed assessments:**

- Late assignments will be subject to a penalty of 20%/day
- There will be one makeup midterm exam scheduled for students with Academic Counselling-approved and documented reasons for missing the regular midterm. If you miss the makeup midterm for an approved and documented reason, then you will write a more comprehensive final exam that includes material tested on the midterm.
- Online discussion forum topics are active for 10 days. Posts after 10 days will not receive participation credit.
- Discussion group alternative assignments (for those who do not attend in-person) will be due 7 days after the in-person class session. Late alternative assignments will not be accepted.
- Group videos must be submitted within 72 hours after the due date. This is necessary to allow fellow students sufficient time to view and grade all videos.

**INC (Incomplete Standing):** If a student has been approved by the Academic Advising Office (in consultation with the instructor/department) to complete term work at a later date, an INC will be assigned. Students with INC will have their course load in subsequent terms reduced to allow them to complete outstanding course work. Students may request permission from Academic Advising to carry a full course load for the term the incomplete course work is scheduled.

**SPC (Special examination):** If a student has been approved by the Academic Advising Office to write a Special Examination and the final exam is the only outstanding course component, an SPC will be assigned. If the class has a makeup exam, the student is expected to write the makeup exam. If the class doesn't have a makeup exam or the student misses the makeup exam for reasons approved by the Academic Advising Office, the student will write the exam the next time the course is offered. Outstanding

SPCs will reduce the course load for the term the exam is deferred as outlined in [Types of Examinations](#) policy.

## 9. Communication

- Students should check the OWL Brightspace site every 24–48 hours
- Students should email their instructor(s) and teaching assistant(s) via email
- Emails will be monitored daily; students will receive a response in 24–48 hours
- This course will use OWL Brightspace forums for discussions
- Students should post all course-related queries on the discussion forum so that everyone can access the questions and responses

## 10. Office Hours

- Office hours are available on an as-needed basis by contacting the teaching assistants
- Office hours may be held in-person or remotely using Zoom

## 11. Resources

- All resources will be posted in OWL Brightspace

## 12. Professionalism & Privacy

Western students are expected to follow the [Student Code of Conduct](#). Additionally, the following expectations and professional conduct apply to this course:

- All course materials created by the instructor(s) are copyrighted and cannot be sold/shared (e.g., Must Knows Facebook group, Course Hero, Chegg, etc.)
- Recordings are not permitted (audio or video) without explicit permission
- Permitted recordings are not to be distributed
- Students will be expected to take an academic integrity pledge before some assessments

Western is committed to providing a learning and working environment that is free of harassment and discrimination. All **students**, staff, and faculty have a role in this commitment and have a responsibility to ensure and promote a safe and respectful learning and working environment. Relevant policies include Western's [Non-Discrimination/Harassment Policy](#) (M.A.P.P. 1.35) and [Non-Discrimination/Harassment Policy – Administrative Procedures](#) (M.A.P.P. 1.35). Any **student**, staff, or faculty member who experiences or witnesses' behaviour that may be harassment or discrimination **must report the behaviour** to the Western's [Human Rights Office](#). Harassment and discrimination can be human rights-based, which is also known as EDI-based, (sexism, racism, transphobia, homophobia, islamophobia, xenophobia, antisemitism, and ableism) or non-human rights-based (personal harassment or workplace harassment).

## 13. How to Be Successful in this Class

Students enrolled in this class should understand the level of autonomy and self-discipline required to be successful.

1. Invest in a planner or application to keep track of your courses. Populate all your deadlines at the start of the term and schedule your time throughout the course.

2. Make it a daily habit to log onto OWL Brightspace to ensure you have seen everything posted to help you succeed in this class.
3. Follow checklists created on OWL Brightspace or create your own to help you stay on track.
4. Take notes as you go through the lesson material. Keeping handwritten notes or even notes on a regular Word document will help you learn more effectively than just reading or watching the videos.
5. Connect with others. Try forming an online study group and try meeting on a weekly basis for study and peer support.
6. Do not be afraid to ask questions. If you are struggling with a topic, check the online discussion boards or contact your instructor(s) and or teaching assistant(s).
7. Reward yourself for successes. It seems easier to motivate ourselves knowing that there is something waiting for us at the end of the task.

## 14. Western Academic Policies and Statements

### A. Absence from Course Commitments

Students must familiarize themselves with the Policy on [Academic Consideration – Undergraduate Students in First Entry Programs](#)

Students missing course work for medical, compassionate, or extenuating circumstances can request academic consideration by completing a request at the central academic consideration portal. Students are permitted one academic consideration request per course per term **without** supporting documentation. Note that supporting documentation is **always** required for academic consideration requests for examinations scheduled by the office of the registrar (e.g., December and April exams) and for practical laboratory and performance tests (typically scheduled during the last week of the term).

Students should also note that the instructor may **designate** one assessment per course per term that requires supporting documentation. This designated assessment is described elsewhere in this document. Academic consideration requests may be denied when flexibility in assessment has already been included. Examples of flexibility in assessment include when there are assessments not required for calculation of the final grade (e.g. 8 out of 10 quizzes) or there is flexibility in the submission timeframe (e.g. 72 hour no late penalty period).

Please note that any academic considerations granted in this course will be determined by the instructor of this course, in consultation with the academic advisors in your Faculty of Registration, in accordance with information presented in this course syllabus. Supporting documentation for academic considerations for absences due to illness should use the [Student Medical Certificate](#) or, where that is not possible, equivalent documentation by a health care practitioner.

#### Accommodation for Religious Holidays

Students should review the policy for [Accommodation for Religious Holidays](#). Where a student will be unable to write examinations and term tests due to a conflicting religious holiday, they should inform their instructors as soon as possible but not later than two weeks prior to writing the examination/term test. In the case of conflict with a midterm test, students should inform their instructor as soon as possible but not later than one week prior to the midterm.

#### Special Examinations

A Special Examination is any examination other than the regular examination, and it may be offered only with the permission of the Dean of the Faculty in which the student is registered, in consultation with the instructor and Department Chair. Permission to write a Special Examination may be given on the basis of

compassionate or medical grounds with appropriate supporting documents. To provide an opportunity for students to recover from the circumstances resulting in a Special Examination, the University has implemented Special Examinations dates. These dates as well as other important information about examinations and academic standing can be found [here](#).

## **B. Academic Offenses**

Scholastic offences are taken seriously, and students are directed [here](#) to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence.

Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

## **C. Accessibility Statement**

Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact Accessible Education (AE) at 661-2111 x 82147 for any specific question regarding an accommodation or review [The policy on Accommodation for Students with Disabilities](#)

## **D. Correspondence Statement**

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 his/her official university address is attended to in a timely manner. You can read about the privacy and security of the UWO email accounts [here](#).

## **E. Discovery Credit Statement**

Students are permitted to designate up to 1.0 Discovery Credit course (or equivalent) for pass/fail grading that can be counted toward the overall course credits required for their degree program. The details of this policy and the deadlines can be found [here](#).

## **F. Turnitin and other similarity review software**

All assignments will be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. Students will be able to view their results before the final submission. 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 Western University and [Turnitin.com](#).

# **15. BMSUE Academic Policies and Statements**

## **Cell Phone and Electronic Device Policy (for in-person tests and exams)**

The Schulich School of Medicine & Dentistry is committed to ensuring that testing and evaluation are undertaken fairly across all our departments and programs. For all tests and exams, it is the policy of the School that any electronic devices, e.g., cell phones, tablets, cameras, smart glasses, smart watch or iPod are strictly prohibited. These devices **MUST** be left either at home or with the student's bag/jacket at the front of the room and **MUST NOT** be at the test/exam desk or in the individual's pocket. Any student found with one of these prohibited devices will receive a grade of zero on the test or exam. Non-programmable calculators are only allowed when indicated by the instructor. The program is not responsible for stolen/lost or broken devices.

## Copyright and Audio/Video Recording Statement

Course material produced by faculty is copyrighted and to reproduce this material for any purposes other than your own educational use contravenes Canadian Copyright Laws. You must always ask permission to record another individual and you should never share or distribute recordings.

## Rounding of Marks Statement

Across the Basic Medical Sciences Undergraduate Education programs, we strive to maintain high standards that reflect the effort that both students and faculty put into the teaching and learning experience during this course. All students will be treated equally and evaluated based only on their actual achievement. **Final grades** on this course, irrespective of the number of decimal places used in marking individual assignments and tests, will be calculated to one decimal place and rounded to the nearest integer, e.g., 74.45 becomes 74, and 74.50 becomes 75. Marks WILL NOT be bumped to the next grade or GPA, e.g., a 79 will NOT be bumped up to an 80, an 84 WILL NOT be bumped up to an 85, etc. The mark attained is the mark you achieved, and the mark assigned; requests for mark “bumping” will be denied.

## Statement on the use of Generative Artificial Intelligence (AI) Platforms

Within this course, students are instructed specifically to use ChatGPT for generation of a news article and then write a critical evaluation of this article. In all other aspects of the course, students are permitted to use AI tools exclusively for information gathering and preliminary research purposes. These tools are intended to enhance the learning experience by providing access to diverse information sources. However, it is essential that students critically evaluate the obtained information, exercise independent thinking, and engage in original research to synthesize and develop their own ideas, arguments, and perspectives. The use of AI tools can serve as a starting point for exploration, with students expected to uphold academic integrity by appropriately attributing all sources and avoiding plagiarism. Assignments, including the Group Video, should reflect the students’ own thoughts and independent work. By adhering to these guidelines, students contribute to a responsible and ethical learning environment that promotes critical thinking, independent inquiry, and allows them to produce original contributions.

## 16. Support Services

- Students who are in emotional/mental distress should refer to Mental Health @Western Health <https://www.uwo.ca/health/> for a complete list of options about how to obtain help.
- To connect with a case manager or set up an appointment, please contact [support@uwo.ca](mailto:support@uwo.ca).
- Other important links:
  - [Academic Advising \(Science and Basic Medical Sciences\)](#)
  - [Appeal Procedures](#)
  - [Registrarial Services](#)
  - [Student Development Services](#)
  - [Student Health Services](#)

## Statement on Gender-Based and Sexual Violence

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