1. Course Information

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.

Lectures:
Course dates: Monday, January 7th, 2019 to Monday, April 8th, 2019
Location: North Campus Building, Room 114
Lecture days: Monday - Wednesday - Friday
Lecture time: 8:30 – 9:30 am

Lectures: Lectures are given from several individuals who work in diverse areas related to infectious diseases both locally and globally.

Course Prerequisite: Microbiology and Immunology 2500A/B

Senate regulation regarding the student’s responsibility for requisites:
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.

Accessibility Statement
Please contact the course instructor if you require material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 x82147 for any specific questions regarding an accommodation.

Learning Outcomes:
To instill an appreciation, awareness and understanding of:
2. Viral, bacterial, fungal and parasitic pathogens responsible for current and past global epidemics.
4. Vector-borne illnesses and how elimination of the vector (e.g. mosquito) would harm our ecosystem.
5. Treatment and prevention strategies available to combat many global infectious diseases, but addressing the difficulties of implementation and economic cost of epidemics.
6. The current HIV epidemic and how the world is responding.
7. How pathogens impact our food supply and lead to malnutrition, war and other diseases.
8. How probiotics and the microbiome can displace and prevent various infectious pathogens.
2. Instructor Information

The TAs will be holding regular drop-in sessions to answer your questions (days and times to be announced).

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<thead>
<tr>
<th>Instructors</th>
<th>Email</th>
<th>Office</th>
<th>Office Hours</th>
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<tbody>
<tr>
<td>Dr. Eric Arts</td>
<td><a href="mailto:Eric.Arts@schulich.uwo.ca">Eric.Arts@schulich.uwo.ca</a></td>
<td>DSB-3014</td>
<td>by appointment</td>
</tr>
<tr>
<td>Dr. Ryan Troyer</td>
<td><a href="mailto:rtroyer@uwo.ca">rtroyer@uwo.ca</a></td>
<td>DSB-3000</td>
<td>by appointment</td>
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This course has several local and external instructors, both scientists and clinicians, who are experts in various aspects of infectious diseases both locally and globally.

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<tr>
<th>Teaching Assistants</th>
<th>Email</th>
<th>Office</th>
<th>Office Hours</th>
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<tbody>
<tr>
<td>Noor Salloum</td>
<td><a href="mailto:nsallou2@uwo.ca">nsallou2@uwo.ca</a></td>
<td></td>
<td>by appointment</td>
</tr>
<tr>
<td>Emmanuel Ndashimye</td>
<td><a href="mailto:endashim@uwo.ca">endashim@uwo.ca</a></td>
<td></td>
<td>by appointment</td>
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<tr>
<th>Course Manager</th>
<th>Email</th>
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<tbody>
<tr>
<td>Dr. Kelly Summers</td>
<td><a href="mailto:ksummers@uwo.ca">ksummers@uwo.ca</a></td>
<td>DSB-3024</td>
<td>by appointment</td>
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<tr>
<th>Course Administrator</th>
<th>Email</th>
<th>Office</th>
<th>Office Hours</th>
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<tbody>
<tr>
<td>Fred Williams</td>
<td><a href="mailto:Fred.Williams@schulich.uwo.ca">Fred.Williams@schulich.uwo.ca</a></td>
<td></td>
<td>Contact Fred using the OWL “message” client for all administrative issues (e.g. missed tests).</td>
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3. Course Materials:

Textbook: There is no required textbook.

Required Readings and Documentary/Video Viewings: Students are expected to complete readings and view documentaries/videos before the corresponding lectures.

OWL: Students are responsible for checking OWL at regular intervals. OWL will be used to communicate information about the course, access lecture notes, and post questions. Lecture notes will be posted on OWL for most lectures, but this is at the discretion of the individual lecturer. Appropriate questions posted on OWL regarding lecture material will be answered by the Teaching Assistants or by the relevant instructor. Students with OWL problems should contact the ITS Helpdesk by phone (519-661-3800), web form (itshelp.uwo.ca) or in person (Support Services Building, main floor).

Copyright Statement: Course material produced by faculty is copyright protected and to reproduce this material for any purposes other than your own educational use contravenes Canadian Copyright Laws. This includes posting any course material (e.g. lecture notes) on public domains.

4. Undergraduate Student Evaluations:

- Midterm 20% Wed Feb. 13th (in-class)
- Final Exam 30% TBA during the final exam period
- Written Newspaper Article 15% Due date – Feb. 1st
- Student Group Video 25% Due date – Mar. 25th (video viewing/grading Apr. 1st)
- Participation Mark 10%
Midterm/Final Exam Format: Format is a combination of multiple-choice and short answer questions. They cover material provided in lectures, discussion groups, assigned readings, and student videos. The final exam will include questions that integrate information learned in the entire course.

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. Scantron Sheets should be covered when not in use. Be aware that Scantron sheets will be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

Please review the **Medical/Compassionate Relief Program Policy** outlined below for the procedures to follow if you are unable to complete an evaluated component of the course (this includes scheduled discussion groups).

**Participation Marks:** Marks are based on participation in class during lectures (asking questions) and Discussion Groups (asking and responding to questions), plus OWL forums (periodically, instructors will post questions on the OWL forum to initiate class discussion).

**Additional Information on Evaluations**

**15% Assessment Rule:**
A detailed and comprehensive set of regulations concerning the scheduling of tests, assignments, etc. is available at: http://www.uwo.ca/univsec/academic_policies/examinations.html. At least three days prior to the deadline for withdrawal from a course without academic penalty, students will receive assessment of work accounting for at least 15% of their final grade. For more details, refer to the link below:
http://www.uwo.ca/univsec/pdf/academic_policies/exam/evaluation_undergrad.pdf

**Cell Phone and Electronic Device Policy:**
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 and the Department of Microbiology and Immunology that any electronic devices, i.e., cell phones, tablets, cameras, 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 Department of Microbiology and Immunology is not responsible for stolen/lost or broken devices.

**Policy on the Rounding and Bumping of Marks:**
Across the Basic Medical Sciences Undergraduate Education programs and within the Department of Microbiology and Immunology 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., 74.4 becomes 74, and 74.5 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.
5. Course Expectations

1) Newspaper Article:
An important aspect of this course is for students to gain an awareness of infectious disease issues, both locally and globally. This assignment allows students to inform others of an issue that interests you in the form of a newspaper article. Please refer to the `How to Write a Newspaper Article` document.

Each student will write a 2-page newspaper article on a topic of interest determined by the student. The topic can relate to current infectious diseases or pathogen events in plants, animals, humans, etc. If the topic is not obtained from a reliable media or publication source, the student must act as a “reporter” and obtain accurate opinions from reliable sources. Sources of information must be acknowledged and revealed. A graduate student from FIMS (Journalism) will be available for assistance. **Late penalty is 25% per day.**

**Resources:**
- https://www.youtube.com/watch?v=8_NmVtnEEA8
- http://www.wikihow.com/Write-a-Newspaper-Article

2) Student Group Video (for undergraduate students):

**Expectations.** Each student within an assigned group is expected to participate and contribute equally in the creation of the video. Each group will be led by Master of Management of Applied Science (MMASc) students enrolled in the course.

**Video Selection.** Students will be provided with a list of topics at the start of the course. Each student must sign-up for their preferred topic by Friday, Jan 20th (the first Discussion Group). A maximum of five students will be able to enroll in each topic.

**Video Format.** Each group will generate a ~10 minute video 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 exceptions of topics related to London, Ontario, at least one expert must reside/work outside of the City of London, Ontario. 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 OWL for viewing and grading by all course members. You will not grade your own video. Each group will present a summary of their video to the class, plus answer questions on their video that are posed during class and posted on the OWL forum. Each group will provide the class with two instructor-approved questions on their topic. Random questions from this bank will be selected (and possibly revised) for 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 (OWL) so it will be exclusive to the course participants. Set a congenial time and place for the interview via Skype, 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:
8% Contribution to the creation of the video as ranked by each member of the group, including the MMASc student group leaders.

5% 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 directors.

2% Contribution to presenting the summary of the video and answering questions posed during class or posted on the OWL forum.

10% Quality of the video, which includes the quality of the expert(s) interviewed, as ranked by course members. Notably, TA and Instructor rankings will be weighted higher than student rankings.

Master of Management of Applied Science (MMASc) students in the Global Health Systems Program

MMASc Student Evaluations:

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<thead>
<tr>
<th>Assessment</th>
<th>Weight</th>
<th>Due Date</th>
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<tbody>
<tr>
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<td>20%</td>
<td>Wed Feb. 13th (in-class)</td>
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<td>15%</td>
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<tr>
<td>Student Group Video</td>
<td>25%</td>
<td>Due date – Mar. 25th (video viewing/grading Apr. 1st)</td>
</tr>
<tr>
<td>Written Article</td>
<td>10%</td>
<td>Due date – April 11th</td>
</tr>
<tr>
<td>Participation Mark</td>
<td>10%</td>
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* MMASc student marks based on the midterm, final exam, written newspaper article, and participation are identical to the undergraduate students in this course. The details of each are outlined above.

1 **Student Group Video:**
You are expected to be a group leader and a full participant providing the same work effort as the undergraduate students within the assigned group. Your role only differs from that of the undergraduate students as to provide expertise and to advise in the making of their video, as well as provide a participation mark for each individual member of the group. The latter includes a student’s contribution to the making of the video, as well as an assessment on their understanding of the topic based on your discussion and questions posed to each student during the making of the video and after the video is submitted. The 15% “Student Group Video” mark reflects the “Quality of the video” mark given to the video that you are a group leader.

2 **Written Article (only for MMASc students):**
This article should be written in a publishable format. Groups of 4-5 MMASc students will be tutored by a course instructor to write an article on a specific topic. It will be graded by the tutor as a pass or fail. Failure will result in 10% reduction in the final grade. If the article achieves sufficient quality for the field, academic rigor and novelty, a manuscript can be prepared as a chapter that may be incorporated into a future book. The relevant MMASc students, TAs and course instructor may be credited as authors. Any proceeds from the book will be donated to charity (based on a student vote for the chosen charity).
Written Article (only for MMASc students): The article should be written in a publishable format. Groups of 3-4 MMASc students will be tutored by a course instructor to write an article on a specific topic. It will be graded by the tutor as a pass or fail. Failure will result in 10% reduction in the final grade. If the article achieves sufficient quality for the field, academic rigor and novelty, a manuscript can be prepared as a chapter that may be incorporated into a future book. The relevant MMASc students, TAs and course instructor may be credited as authors. Any proceeds from the book will be donated to charity (based on a student vote for the chosen charity).

7. Additional Information/Statements

Statement on Use of Electronic Devices

Students may only bring pencils, pens and erasers to midterm tests and examinations. No other material or electronic devices are permitted including calculators or phones. Due to safety concerns, the use of computers or cellular phones will not be not permitted during laboratories unless otherwise stated.

Statement on Academic Offences

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

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

Medical/Non-Medical Relief Program Policy

Notify Mr. Fred Williams immediately. It is current policy that students who are unable to write a test or examination or other form of course evaluation are required to obtain a medical certificate or other supporting documentation in the case of an unexpected absence on compassionate grounds. Take this documentation to the Western Science Academic Counselling Office (Science and Basic Medical Science students) located in the North Campus Building Room 280, or to your appropriate Home Faculty Counseling Office. Do not submit the documentation to the instructor. An academic counselor in that office will review and either approve or deny the accommodation request. It will be the Academic Counseling office that will determine if accommodation is warranted. This policy applies to all forms of assessment, including evaluations that are less than 10%. Once the accommodation has been approved, it is the student's responsibility to make alternative arrangements with the Academic Counsellor and Course Coordinator. In the event of a missed final exam, a "Recommendation of Special Examination" form must be obtained from the Academic Counselling Office immediately and signed by the appropriate department.

A. Absence for Medical Illness:

Students must familiarize themselves with the Policy on Accommodation for Medical Illness for Undergraduate Students, located at: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf
A student requiring academic accommodation due to illness, should use the Student Medical Certificate when visiting an off-campus medical facility or request a Record's Release Form (located in the Dean's Office) for visits to Student Health Services. The form can be found at:
http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf
B. Absence for Non-Medical Reasons:

**Bereavement or Compassionate Reasons.** Petitions for permission to write a special examination will be entertained only when they are submitted on compassionate grounds with supporting documents (e.g. a death in the family, not weddings, vacations, etc.). Such documentation must be submitted by the student directly to your appropriate Academic Counsellor as soon as possible *and not to the instructor*. It will subsequently be the Academic Counselling Office that will determine if accommodation is warranted.

**Religious Holiday.** Students must familiarize themselves with the Policy on Accommodation for Religious Holidays. 
https://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_religious.pdf

C. 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.

Students must familiarize themselves with the University policy and fixed dates for special examinations: 
http://www.uwo.ca/univsec/pdf/academic_policies/exam/definitions.pdf

Support Services

Registrarial Services: http://www.registrar.uwo.ca/

Academic Counselling (Science and Basic Medical Sciences): http://www.uwo.ca/sci/counselling

USC Student Support Services: http://westernusc.ca/services/

Student Development Services: https://www.uwo.ca/health/

Student Health Services: https://www.uwo.ca/health/


Students that are in emotional/mental distress should refer to Mental Health@Western 
https://www.uwo.ca/health/mental_wellbeing/index.html for a complete list of options how to obtain help.