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:
Location: North Campus Building, Room 114
Lecture days: Monday - Wednesday - Friday
Lecture time: 8:30–9:30 am

Course Requisite(s): 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.

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 x 82147 for any specific questions regarding an accommodation.

Learning Outcomes:

To instill an appreciation 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

Office Hours: Instructors will be available for a few minutes before/after lecture.

<table>
<thead>
<tr>
<th>Instructors</th>
<th>Email</th>
<th>Office</th>
<th>Office Hours</th>
</tr>
</thead>
<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><em>Course Coordinator</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr. Michael Clarke</td>
<td><a href="mailto:mwclarke@uwo.ca">mwclarke@uwo.ca</a></td>
<td></td>
<td>by appointment</td>
</tr>
<tr>
<td><em>Instructor</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tutorial Assistants</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aaron Johnson</td>
<td><a href="mailto:aaronjohnson13@gmail.com">aaronjohnson13@gmail.com</a></td>
<td></td>
<td>by appointment</td>
</tr>
<tr>
<td>Keertika Yogendirarajah</td>
<td><a href="mailto:kyogendi@uwo.ca">kyogendi@uwo.ca</a></td>
<td></td>
<td>by appointment</td>
</tr>
<tr>
<td>Course Manager</td>
<td></td>
<td></td>
<td></td>
</tr>
<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>
</tr>
<tr>
<td>Course Administrator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fred Williams</td>
<td><a href="mailto:Fred.Williams@schulich.uwo.ca">Fred.Williams@schulich.uwo.ca</a></td>
<td>Contact Fred for all administrative issues (e.g. missed test).</td>
<td></td>
</tr>
</tbody>
</table>

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.

WebCT: *Students are responsible for checking OWL at regular intervals.* OWL will be used to communicate information about the course, build online discussions, access lecture notes, submit/post student videos, and post questions. 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).

All course material produced by instructors is copyright protected and to reproduce this material for any purpose other than the student's own educational use contravenes Canadian Copyright law.

4. Evaluations:

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Weight</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midterm</td>
<td>20%</td>
<td>Feb 27</td>
</tr>
<tr>
<td>Final Exam</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>Student Group Video</td>
<td>25%</td>
<td>due date - March 20th</td>
</tr>
<tr>
<td>Written Newspaper article</td>
<td>15%</td>
<td>due date - Wed Feb 8th</td>
</tr>
<tr>
<td>Participation mark</td>
<td>10%</td>
<td></td>
</tr>
</tbody>
</table>

**Midterm/final exam:** Format is a combination of multiple-choice and short answer questions that cover material provided in lectures, discussion groups, and student videos. The final exam will include questions that integrate information learned in the entire course. No calculators, phones or other electronic devices are permitted during tests.

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 will be rounded up to the next whole integer, e.g. a 73.5 becomes a 74 and marks WILL NOT be bumped to the next grade or GPA, e.g. a 79 will NOT be rounded up to an 80, an 84 WILL NOT be rounded 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) Student Group Videos:

Students are expected to generate videos within their assigned group. This 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 5-10 minute video on their topic. Students must interview experts on their topic, plus incorporate current information in the media. It is expected that each group member contributes equally in its creation, and appears either visibly or verbally as a presenter in the 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 and answer questions, plus address any questions on their video/topic that are posted on the OWL forum. Each group will provide the class with TWO instructor-approved questions on their topic - instructors will select random questions from this bank for the final exam.

How to Approach and Interview an Expert.
1. Do your research first, then select 1-2 experts in the field to interview.
2. Prepare the interview questions.
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 is 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).
- 2% Quality as a presenter in the video – speaking clearly, slowly, etc.
- 5% 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 students, TAs and course instructors. Notably, TA and instructor rankings will be weighted higher than student rankings.

2) Newspaper Article: 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

3) Participation Mark: Marks are based on attendance, plus participation in class Discussions Groups (asking and responding to questions), OWL forums (periodically, instructors will post questions on the OWL forum to initiate class discussion), and ranking student videos.
7. Additional Information/Statements

Statement on Intellectual Property
All course material produced by faculty is copyright protected and to reproduce this material for any purpose other than the student's own educational use contravenes Canadian Copyright law. This includes posting any course material (e.g. lecture notes, lab manual) on public domains.

Statement on Academic Offences
Academic dishonesty is defined as cheating, plagiarism and any form of copying. The university requires all members of the University Community to familiarize themselves and to follow copyright and fair use requirements. Scholastic offences are taken seriously and will not be tolerated. Violations will subject you to disciplinary action under university policies. You are responsible for reading and respecting the university’s policy, specifically the definition of what constitutes a Scholastic Offence, at the following website:  http://www.uwo.ca/univsec/appeals_discipline/index.html

Absence from course commitments or late submissions due to:

A. Medical Illness:
Students must familiarize themselves with the Policy on Accommodation for Medical Illness.

B. Non-Medical Reasons:
Religious Holiday. Students must familiarize themselves with the Policy on Accommodation for Religious Holidays.

Bereavement or Compassionate Reasons. Documentation must be submitted by the student directly to the Dean’s Office and not to the instructor. It will subsequently be the Dean’s Office that will determine if accommodation is warranted.

Statement from the Dean’s Office, Faculty of Science:
If you are unable to meet a course requirement due to illness or other serious circumstances (e.g. bereavement), you must provide valid medical or other supporting documentation to the Dean's office as soon as possible and contact your instructor immediately. It will subsequently be the Dean’s Office that will determine if accommodation is warranted. It is the student's responsibility to make alternative arrangements with their instructor once the accommodation has been approved and the instructor has been informed. 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.

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

Academic Counselling (Science and Basic Medical Sciences): http://www.uwo.ca/sci/undergrad/academic_counselling/index.html

Student Support Services:  http://westernusc.ca/service/

Student Development Centre:  http://www.sdc.uwo.ca

Student Health Services:  http://www.shs.uwo.ca

Students who are in emotional/mental distress should refer to Health and Wellness website for a complete list of options about how to obtain help: http://www.health.uwo.ca/mental_health