SPPH 520 – Control of Communicable Diseases
January – April 2019

Time: Saturday January 19th, 9am – 5pm
Saturday February 16th, 9am – 5pm
Saturday March 16th, 9am – 5pm

Location: B104

Office: 105

Instructor: Dr. David M. Patrick

Assistant: Hattaw.Khalid@phsa.ca

Teaching Assistant: Michael Lee

Email: michaeljosephlee2@gmail.com

Course Objectives:
- To understand the unique features of infectious disease epidemiology
- To synthesize and develop approaches to investigating outbreaks and managing problems in infectious disease control

Prerequisites:
- SPPH 502 or similar course in introductory epidemiology
- SPPH 400 or similar course in introductory statistics
- Students will require some University-level background in the biological or health sciences or SPPH 524 (Biology of Public Health Diseases)

Required Textbooks:
- Nelson et al. Infectious Diseases Epidemiology, Theory and Practice (3rd edition or more recent), James and Barlett Publishers, Boston.

Notes on Distance Learning:
This course is primarily delivered online via UBC’s online learning platform “Canvas”. Each week, there will be a new module posted online with associated readings, videos, and activities to be completed. The concepts covered in these modules will be the basis for our three in-person sessions.

Assessments:

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<thead>
<tr>
<th>Assessment</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Participation</td>
<td>15%</td>
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<tr>
<td>Assignments</td>
<td>15%</td>
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<tr>
<td>Term Paper (5% outline, 15% final)</td>
<td>20%</td>
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<tr>
<td>Seminar</td>
<td>10%</td>
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<tr>
<td>Mid-Term Exam</td>
<td>15%</td>
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<tr>
<td>Final Exam</td>
<td>25%</td>
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## Schedule

<table>
<thead>
<tr>
<th>Module</th>
<th>Dates</th>
<th>Topics</th>
<th>Assessments Due</th>
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| 1      | Jan. 4 – 10 | - Course introductions  
- History of communicable disease (CD) control  
- Biological foundations of CD control |                                               |
| 2      | Jan. 11 – 18| - Introduction to infectious disease epidemiology  
- Blending epidemiology with lab findings for CD control | Assignment #1 due (Jan 18th)                  |
| * In-Class | Jan. 19 | - Introductions  
- Consolidation of Modules 1 and 2 | Canada Reads debate due                       |
| 3      | Jan. 20 – 31| - Introduction to outbreak investigation |                                               |
| 4      | Jan. 26 – 31| - Community control measures  
- Herd immunity | Assignment #2 due (Jan. 26th)                  |
| 5      | Feb. 1 – 7 | - Role of mathematical modelling |                                               |
| Review | Feb. 8 – 15 | - Review for mid-term | Term paper topic chosen (Feb. 8th)           |
| * In-Class | Feb. 16 | - Consolidation of Modules 3 – 5  
- Enteric diseases  
- Zoonotic diseases | Mid-Term Exam                                 |
| 6      | Feb. 22 – 28 | - Sexually transmitted infections  
- Agents transmitted by blood and body fluids | Term paper outline due (Feb. 28th)           |
| 7      | Mar. 1 – 7 | - Vaccine preventable disease  
- Immunization epidemiology | Assignment #3 due (Mar. 7th)                  |
| 8      | Mar. 8 – 15 | - Vector-borne diseases  
- Influenza |                                               |
| * In-Class | Mar. 16 | - Consolidation of Modules 6 – 9  
- Student Seminars | Seminar due                                   |
| 9      | Mar. 17 – 21| - Designing control programs |                                               |
| 10     | Mar. 22 – 28| - Pandemic planning |                                               |
| Review | Mar. 29 – Apr. 4 | - Online tutorial and review |                                               |
| Exam/Paper | Apr. 5 – 12 | - Final exam (date/time TBD) | Term paper due (Apr. 12th)                  |