

**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.
- Communicable Disease Control Manual. David Heymann Ed. (19th edition or more recent), American Public Health Association.

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:

<i>Participation</i>	15%
<i>Assignments</i>	15%
<i>Term Paper (5% outline, 15% final)</i>	20%
<i>Seminar</i>	10%
<i>Mid-Term Exam</i>	15%
<i>Final Exam</i>	25%

**Schedule**

Module	Dates	Topics	Assessments Due
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 18 th)
* 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. 26 th)
5	Feb. 1 – 7	- Role of mathematical modelling	
Review	Feb. 8 – 15	- Review for mid-term	Term paper topic chosen (Feb. 8 th)
* 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. 28 th)
7	Mar. 1 – 7	- Vaccine preventable disease - Immunization epidemiology	Assignment #3 due (Mar. 7 th)
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. 12 th)