

Pathogenic Bacteriology (Biol. 3711, 2016F)

Lecture: 11:30 - 1:00 pm, Tuesday and Thursday, RC1003

Instructor: Kam Leung CB 4024 (ktleung@lakeheadu.ca)

Office Hours: Monday 2:30 - 3:30 pm or by appointment.

Outline of topics

1. Introduction
2. Approaches and methods in studying bacterial diseases.
3. First line of defense against bacterial infections.
4. Second line of defense against bacterial infections.
5. Vaccination.
6. Bacterial strategies against the human immune system.
7. Bacterial Exotoxins.
8. Antimicrobial compounds and antibiotic resistance.
9. Selective bacterial pathogens (may be changed depending on the progress of the course):
 - *E. coli*
 - Food-borne pathogens: *Salmonella*, *Listeria* and *Campylobacter*.
 - *Staphylococcus*, *Streptococcus (Enterococcus)* and *Streptococcus pneumoniae*
 - *Pseudomonas aeruginosa* and related species
 - Sexually transmitted bacterial infections: *Neisseria*, *Chlamydia* and *Treponema pallidum*

Examinations

Quizzes: Sept 20 (Tue), Oct 4 (Tue), Nov 10 (Thu), Nov 24 (Thu).

Mid-term exam: Oct 25, 2016 (Tue).

Final exam: TBA

Last day to Add: Sept 19, 2016

Last day to Drop: Nov 7, 2016

Last day of class: Dec 5, 2016

Four Quizzes total of 30%. One Mid-term Exam is worth 30%. The Final exam is 40% and will cover materials in the whole course.

Textbook

Salyers and Whitt. 2011. Bacterial Pathogenesis: A molecular approach (3rd Edition). ASM Press, Washington, D.C.