

Pathogenic Bacteriology (Biology 3711, 2019W)

Lecture: 8:30 - 10:00 am, Wednesday and Friday, AT1001

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

Office Hours: Wednesday 10:00 - 11:00 am 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*

Quizzes & Examinations

Quizzes: Jan 23 (Wed), Feb 8 (Fri), March 15 (Fri), April 3 (Wed).

Mid-term exam: Feb. 27 (Wed).

Final exam: TBA

Last day to Add: January 18, 2019

Last day to Drop: March 8, 2019

Last class: April 5, 2018

Four Quizzes total of 30%. The Mid-term Exam is worth 30%. The Final exam is 40% and covers material of the whole course.

Textbook

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