

Pathogenic Bacteriology (Biology 3711, 2018W)

Lecture: 8:30 - 10:00 am, Wednesday and Friday, RC0005

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

Office Hours: Monday 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*

Examinations

Quizzes: Jan 24 (Wed), Feb 9 (Fri), March 16 (Fri), April 4 (Wed).

Mid-term exam: Feb. 28, 2018 (Wed).

Final exam: TBA

Last day to Add: January 19, 2018

Last day to Drop: March 9, 2018

Last class: April 19, 2018

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.