

Pathogenic Bacteriology (Biology 3711, 2020W)

Lecture: 4:00 - 5:30 pm, Monday and Wednesday, Room SN1015

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

Office Hours: Monday 3:00 - 4:00 am or by appointment.

Outline of topics

1. Introduction
2. First line of defense against bacterial infections.
3. Second line of defense against bacterial infections.
4. Vaccination.
5. Approaches and methods in studying bacterial diseases.
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 20 (Mon), Feb 3 (Mon), March 11 (Wed), March 25 (Wed).

Mid-term exam: Feb. 24 (Mon).

Final exam: TBA

Last day to Add: January 17 (Friday), 2020

Last day to Drop: March 6 (Friday), 2020

Last class: April 1 (Wed), 2020

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.