

Biology of Microorganisms Biology 2711 (2019F)**Lecture: Mon & Wed 5:30 pm – 7:00 pm (Room SN1050)****Course instructor: Kam Tin Leung, CB4024****Phone: 343-8265****E-mail: ktleung@lakeheadu.ca****Office hours: Monday, 9am – 11am (OR appointment)****Lab: Room CB 3012 (Starts in the 2nd week of the term)****Lab instructor: Michael Moore, CB3011****Phone: 343-8909****E-mail: mnmoore@lakeheadu.ca**

This course gives an overview of the biology of microorganisms. Two major areas will be covered in this course. Theme 1 includes some history and general aspects of microbiology, bacterial cell structure, metabolism and taxonomy. Theme 2 includes general bacterial and viral genetics. Specific disciplines of microbiology will be offered in the 3rd and the 4th years (e.g. Pathogenic Bacteriology, Applied and Environmental Microbiology, Food Microbiology, Biology of Food Safety, Molecular Genetics, Biology of Fungi, Parasitology, Research Internship and Honours Thesis).

Michael Moore is the lab instructor of the Biology of Microorganisms course. The lab is a mandatory part of this course. Students will learn basic skills in handling bacteria, proper use of microscope, staining and aseptic techniques, characterize and identify microorganisms.

Textbook	Microbiology by Foster et al.
Class notes	D2L
Lab book	D2L
Lecture	Mon & Wed 5:30 – 7:00 pm (SN 1015)
Lab	CB 3012
Final date to register	Sept. 16 (Monday)
Final date to withdraw	Nov. 11 (Monday)
1st midterm exam (20%)	Sept. 30 (Monday)
2 nd midterm exam (20%)	Oct. 30 (Wednesday)
Final exam (30%)	To be arranged
Laboratory (30%)	
Total = 100%	

Lecture schedule for Biology of Microorganisms (Biol. 2711)

- May change depending on the progress of the course.

Date	Topic
Sept. 4 (Wed)	Introduction and general microbiology
Sept. 9 (Mon) Sept. 11 (Wed)	Introduction and general microbiology Introduction and general microbiology
Sept. 16 (Mon) Sept. 18 (Wed)	Cell structure and function Cell structure and function

Sept. 23 (Mon) Sept. 25 (Wed)	Microbial metabolism Microbial metabolism
Sept. 30 (Mon) Oct. 2 (Wed)	1st Mid-term exam Microbial growth
Oct. 7 (Mon) Oct. 9 (Wed)	Microbial growth Sterilization, disinfection and antimicrobial agents
Oct. 14 -18	Study Week
Oct. 21 (Mon) Oct. 23 (Wed)	Antibiotics Molecular genetics: DNA replication
Oct. 28 (Mon) Oct. 30 (Wed)	Molecular genetics: DNA replication Gene expression
Nov. 4 (Mon) Nov. 6 (Wed)	2nd Mid-term exam Genetic regulations
Nov. 11 (Mon) Nov. 13 (Wed)	Bacterial genetics Bacterial genetics
Nov. 18 (Mon) Nov. 20 (Wed)	Biotechnology Bacterial taxonomy and diversity
Nov. 25 (Mon) Nov. 27 (Wed)	Viruses Viruses
Dec. 2 (Mon)	Viruses