

**Biology of Microorganisms Biology 2711 (2018F)****Lecture: Tue & Thu 10:00 am – 11:30 am (Room RB1022)****Course instructor: Kam Tin Leung, CB4024****Phone: 343-8265****E-mail: [ktleung@lakeheadu.ca](mailto:ktleung@lakeheadu.ca)****Office hours: Tue & Thu, 11:30am - 12:30pm (OR appointment)****Lab: Room CB 3012 (Starts in the 2<sup>nd</sup> week of the term)****Lab instructor: Michael Moore, CB3011****Phone: 343-8909****E-mail: [mnmoore@lakeheadu.ca](mailto: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 3<sup>rd</sup> and the 4<sup>th</sup> 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	Tue & Thu 10:00 – 11:30 am (RB 1022)
Lab	CB 3012
Final date to register	Sept. 17 (Monday)
Final date to withdraw	Nov. 9 (Friday)
1st midterm exam (20%)	Sept. 20 (Thursday)
2 <sup>nd</sup> midterm exam (20%)	Oct. 23 (Tuesday)
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 (Tue)	Introduction and general microbiology
Sept. 6 (Thu)	
Sept. 11 (Tue)	Introduction and general microbiology Cell structure and function
Sept. 13 (Thu)	
Sept. 18 (Tue)	Cell structure and function

Sept. 20 (Thu)	<b>1<sup>st</sup> Mid-term exam</b>
Sept. 25 (Tue) Sept. 27 (Thu)	Microbial metabolism Microbial metabolism
Oct. 2 (Tue) Oct. 4 (Thu)	Microbial metabolism Microbial growth
Oct. 9 (Tue) Oct. 11 (Thu)	<b>Study Week</b>
Oct. 16 (Tue) Oct. 18 (Thu)	Sterilization, disinfection and antimicrobial agents Antibiotics
Oct. 23 (Tue) Oct. 25 (Thu)	<b>2<sup>nd</sup> Mid-term exam</b> Molecular genetics: DNA replication
Oct. 30 (Tue) Nov. 1 (Thu)	Molecular genetics: DNA replication Gene expression and regulations
Nov. 6 (Tue) Nov. 8 (Thu)	Gene expression and regulations Bacterial genetics
Nov. 13 (Tue) Nov. 15 (Thu)	Bacterial genetics Biotechnology
Nov. 20 (Tue) Nov. 22 (Thu)	Bacterial taxonomy and diversity Bacterial taxonomy and diversity
Nov. 27 (Tue) Nov. 29 (Thu)	Viruses Viruses