Biology of Microorganisms 2017F (Biology 2711)

Lecture: Wednesday & Friday 10:00 am – 11:30 am (Room RC0005)

Course instructor: Kam Tin Leung, CB4024 (Office hour – Monday 1:30 - 2:30 pm)

Phone: 343-8265

E-mail: ktleung@lakeheadu.ca

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

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 Wed & Friday 10:00 – 11:30 am (Room RC0005)

Lab CB 3012

Final date to register

Final date to withdraw

Sept. 18 (Monday)

Nov. 3 (Friday)

1st midterm exam (20%)

Sept. 22 (Friday)

Oct. 25 (Wednesday)

Final exem (30%)

To be extrapped

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. 6 (Wed)	Introduction and general microbiology
Sept. 8 (Fri)	Introduction and general microbiology
Sept. 13 (Wed)	Introduction and general microbiology
Sept. 15 (Fri)	Cell structure and function
Sept. 20 (Wed)	Cell structure and function
Sept. 22 (Fri)	1 <sup>st</sup> Mid-term exam
Sept. 27 (Wed)	Microbial metabolism
Sept. 29 (Fri)	Microbial metabolism
Oct. 4 (Wed)	Microbial metabolism
Oct. 6 (Fri)	Microbial growth
Oct. 11 (Wed)	Study Week
Oct. 13 (Fri)	Staty West
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Oct. 18 (Wed)	Sterilization, disinfection and antimicrobial agents Antibiotics
Oct. 20 (Fri)	Antibiotics
Oct. 25 (Wed)	2 <sup>nd</sup> Mid-term exam
Oct. 27 (Fri)	Molecular genetics: DNA replication
Nov. 1 (Wed)	Molecular genetics: DNA replication
Nov. 3 (Fri)	Gene expression and regulations
Nov. 8 (Wed)	Gene expression and regulations
Nov. 10 (Fri)	Bacterial genetics
Nov. 15 (Wed)	Bacterial genetics
Nov. 17 (Fri)	Biotechnology
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Nov. 22 (Wed)	Bacterial taxonomy and diversity
Nov. 24 (Fri)	Bacterial taxonomy and diversity
Nov. 29 (Wed)	Viruses
Dec. 1 (Fri)	Viruses