

Department of Experimental Pathology, Immunology and Microbiology

Chairperson:	Matar, Ghassan
Professors:	Khoury, Samia; Matar, Ghassan; Sayegh, Mohamed
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Assistant Professors:	Abou Fayad, Antoine; Al-Awar, Ghassan; Massaad, Michel; Shirinian, Margret; Esber, Saba

The Department of Experimental Pathology, Immunology and Microbiology offers courses to medical laboratory sciences (MLSP) students as well as to nursing, medical and graduate students. It offers a graduate program (discipline of Microbiology and Immunology) leading to a master's degree (MS) or doctoral degree (PhD) in Biomedical Sciences.

The requirements for admission to the graduate program are stated on page 34 of this catalogue.

IDTH 203 The Immune System in Health and Disease 37.28; 3 cr.
See Interdepartmental Courses.

IDTH 205 Microbiology and Infectious Diseases 37.28; 5 cr.
See Interdepartmental Courses.

MBIM 223 Parasitology for MLSP Degree Students 39.39; 4 cr.
A course of diagnostic parasitology. Second term.

MBIM 237 Microbiology and Immunology 32.64; 3 cr.
for Nursing Degree Students

A course on the fundamental aspects of medical microbiology and immunology for nursing students. Second term.

MBIM 260 Elective in Infectious Diseases for Medicine III and IV 0.180
A course on basic evaluation, diagnosis and management of infectious diseases. One month.

MBIM 261 Elective in Immunology for Medicine III and IV 0.180
A course that is an introduction to immunological research and its application to clinical practice. One month.

- MBIM 310 Basic and Medical Immunology 32.32; 1 cr.**
A course on innate and adaptive immune mechanisms, infection and immunity, vaccination, immune mechanisms in diseases and tissue injury and therapeutic immunology. *Second term.*
- MBIM 311 Basic and Medical Bacteriology 32.32; 3 cr.**
A course on the characteristics and classification of medically important bacteria, diseases caused by bacteria, anti-bacterial agents, susceptibility testing, prophylaxis and therapy. *Second term.*
- MBIM 312 Basic and Medical Parasitology-Mycology 16.32; 2 cr.**
A course on the characteristics of medically important parasites and fungi, diseases caused by parasites and fungi, anti-parasitic and anti-fungal agents, prophylaxis and therapy. *Second term.*
- MBIM 313 Basic and Medical Virology 16.32; 2 cr.**
A course on the characteristics and classification of medically important viruses, diseases caused by viruses, anti-viral agents, prophylaxis and therapy. *Second term.*
- MBIM 314 Tutorial in Immunology 32.0; 2 cr.**
- MBIM 315 Tutorial in Bacteriology 32.0; 2 cr.**
- MBIM 316 Tutorial in Virology 32.0; 2 cr.**
- MBIM 317 Tutorial in Parasitology-Mycology 32.0; 2 cr.**
- MBIM 318 Fruit Flies: Experimental Model Organism 1 cr.**
A course designed to introduce graduate students to a variety of topics and techniques including the latest approaches for studying human diseases using *Drosophila melanogaster* as a model system. The course also includes a hands-on laboratory sessions.
- MBIM 319 Natural Products as Anti-Infective Agents 1 cr.**
The course will cover screening methods, biosynthesis, and mode of action of novel anti-infective in addition to early pharmacokinetics and pharmacodynamics properties. *Second term. Prerequisite course: BIOC322.*
- MBIM 320 Microbiology and Immunology 3 cr.**
A course on the fundamental aspects of basic and medical microbiology and immunology offered to non-Microbiology & Immunology graduate students at the MS and PhD levels. *First term.*
- MBIM 326 Applied and Advanced Basic and Medical Immunology 32.64; 1 cr.**
A treatise on advances in immunological diseases, their molecular mechanisms and their laboratory diagnosis. *Second term. Alternate years.*
- MBIM 327 Advanced Basic, molecular and Medical Bacteriology 32.64; 1 cr.**
A treatise on advances in the epidemiology, pathogenesis, immune response, diagnosis and prevention of bacterial infections, with particular emphasis on bacterial genetics and antimicrobial resistance. *Second term. Alternate years.*

MBIM 328	Applied and Advanced Basic, molecular and Medical Parasitology	32.64; 1 cr
A treatise on advances in the epidemiology, pathogenesis, immune response, diagnosis and prevention of parasitic infections. <i>Second term. Alternate years.</i>		
MBIM 329	Applied and Advanced Basic, molecular and Medical Virology	32.64; 1 cr.
A treatise on advances in the epidemiology, pathogenesis, immune response, diagnosis and prevention of parasitic infections. <i>Second term. Alternate years</i>		
MBIM 330	Molecular Microbiology	32.64; 3 cr.
A course on molecular applications on the identification of infectious agents. <i>Second term. Alternate years.</i>		
MBIM 331	Infection Control	16.0; 1 cr.
A treatise on the prevention of infections in the laboratory. <i>Second term.</i>		
MBIM 390	Seminar	0.32; 1 cr.
<i>Annually.</i>		
MBIM 394	Journal Club	0 cr.
<i>Annually.</i>		
MBIM 395A/B	Comprehensive Exam	0 cr.
<i>Prerequisite: Consent of advisor.</i>		
MBIM 399 A/B/C/D/E	MS Thesis	9 cr.