

# Department of Experimental Pathology, Immunology and Microbiology

Chairperson:	Matar, Ghassan
Professors:	Khoury, Samia; Matar, Ghassan; Sayegh, Mohamed
Emeritus Professor:	Abdel Noor, Alexander
Associate Professor:	El Hajj, Hiba; Rahal, Elias
Assistant Professors:	Abou Fayad, Antoine; Al-Awar, Ghassan; Massaad, Michel; Shirinian, Margret; Zaraket, Hassan
Instructor:	Saba, Esber

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 36 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 Students      39.39; 4 cr.**  
*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 Immunology      32.32; 3 cr.**  
 A course on innate and adaptive immune mechanisms, infection and immunity, vaccination, immune mechanisms in tissue injury and therapeutic immunology. *Second term.*

- MBIM 311 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 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 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, mode of action of novel anti-infectives 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 Immunology 32.64; 3 cr.**  
A course on immunological diseases and their laboratory diagnosis. *Second term. Alternate years.*
- MBIM 327 Applied and Advanced Medical Bacteriology 32.64; 3 cr.**  
A course on the epidemiology, pathogenesis, immune response, diagnosis and prevention of bacterial infections. *Second term. Alternate years.*
- MBIM 328 Applied and Advanced Parasitology 32.64; 3 cr.**  
A treatise on epidemiology, pathogenesis, immune response, diagnosis and prevention of parasitic infections. *Second term. Alternate years.*
- MBIM 329 Applied and Advanced Virology 32.64; 3 cr.**  
A treatise on epidemiology, pathogenesis, immune response, diagnosis and prevention of viral infections. *Second term. Alternate years.*

<b>MBIM 330</b>	<b>Molecular Microbiology</b>	<b>32.64; 3 cr.</b>
A course on molecular applications on the identification of infectious agents. <i>Second term. Alternate years.</i>		
<b>MBIM 331</b>	<b>Infection Control</b>	<b>16.0; 1 cr.</b>
A treatise on the prevention of infections in the laboratory. <i>Second term.</i>		
<b>MBIM 390</b>	<b>Seminar</b>	<b>0.32; 1 cr.</b>
<i>Annually.</i>		
<b>MBIM 394</b>	<b>Journal Club</b>	<b>0 cr.</b>
<i>Annually.</i>		
<b>MBIM 395A/B</b>	<b>Comprehensive Exam</b>	<b>0 cr.</b>
<i>Prerequisite: Consent of advisor.</i>		
<b>MBIM 399</b> <b>A/B/C/D/E</b>	<b>MS Thesis</b>	<b>9 cr.</b>