

## Planning and Quality Assurance Affairs

Form (A)

### Course Specifications

#### General Information

<b>Course name</b>	Medical Microbiology
<b>Course number</b>	MEDI3401
<b>Faculty</b>	
<b>Department</b>	
<b>Course type</b>	College Needs
<b>Course level</b>	3
<b>Credit hours (theoretical)</b>	3
<b>Credit hours (practical)</b>	1
<b>Course Prerequisites</b>	

#### Course Objectives

- 1 - 1. To recognize the structural components of microbes (viruses and parasites) and medical insects and how these impact the pathogenesis of disease. 2. To know the common microorganisms associated with specific clinical diseases and what factors are involved in pathogenesis. 3. To appreciate the role of vaccines in disease prevention. 4. To appreciate the role of the clinical laboratory in diagnosis and management of infectious diseases. 5. To develop the ability to correlate the clinical picture with laboratory information to establish a diagnosis.
- 2 - 1. To recognize the structural components of microbes (viruses and parasites) and medical insects and how these impact the pathogenesis of disease.
- 3 - 2. To know the common microorganisms associated with specific clinical diseases and what factors are involved in pathogenesis.
- 4 - 3. To appreciate the role of vaccines in disease prevention
- 5 - 4. To appreciate the role of the clinical laboratory in diagnosis and management of infectious diseases

## Intended Learning Outcomes

Knowledge and Understanding	<ul style="list-style-type: none"> <li>* 1. Students know the structural components of microbes (viruses and parasites) and medical insects 2. Students know the pathogenesis of disease caused by viruses and parasites 3. Students understand the clinical findings caused by viruses and parasites 4. Students understand the laboratory diagnosis of diseases caused by viruses and parasites</li> <li>* 1. Students know the structural components of microbes (viruses and parasites) and medical insects 2. Students know the pathogenesis of disease caused by viruses and parasites 3. Students understand the clinical findings caused by viruses and parasites 4. Students understand the laboratory diagnosis of diseases caused by viruses and parasites</li> <li>* 1. Students know the structural components of microbes (viruses and parasites) and medical insects 2. Students know the pathogenesis of disease caused by viruses and parasites 3. Students understand the clinical findings caused by viruses and parasites 4. Students understand the laboratory diagnosis of diseases caused by viruses and parasites</li> <li>* 1. Students know the structural components of microbes (viruses and parasites) and medical insects</li> <li>* 2. Students know the pathogenesis of disease caused by viruses and parasites</li> <li>* 3. Students understand the clinical findings caused by viruses and parasites</li> <li>* 2. Students could make a differential diagnosis for patients presented with infectious diseases</li> <li>* 2. Students are able to do blood film for diagnosis of certain parasites</li> <li>* 3. Students could do the different types of stool analysis</li> </ul>
Intellectual Skills	<ul style="list-style-type: none"> <li>* 1. Students know the structural components of microbes (viruses and parasites) and medical insects 2. Students know the pathogenesis of disease caused by viruses and parasites 3. Students understand the clinical findings caused by viruses and parasites 4. Students understand the laboratory diagnosis of diseases caused by viruses and parasites</li> <li>* 1. Students know the structural components of microbes (viruses and parasites) and medical insects 2. Students know the pathogenesis of disease caused by viruses and parasites 3. Students understand the clinical findings caused by viruses and parasites 4. Students understand the laboratory diagnosis of diseases caused by viruses and parasites</li> <li>* 4. Students understand the laboratory diagnosis of diseases caused by viruses and parasites</li> <li>* 1. Students' clinical sense is developed</li> </ul>
Professional Skills	<ul style="list-style-type: none"> <li>* 1. Students are able to analyze the process of different laboratory of viral infections</li> </ul>
General Skill	<ul style="list-style-type: none"> <li>* The students skills developed to be familiar with the role of viruses and parasites in causing diseases</li> </ul>

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## Course Contents

- 1 - Basic Virology
- 2 - DNA enveloped Viruses
- 3 - DNA enveloped Viruses
- 4 - RNA enveloped Viruses
- 5 - RNA non-enveloped Viruses
- 6 - Hepatitis Viruses
- 7 - Arbo viruses, HIV
- 8 - Tumor Viruses, Slow Virus & Prions
- 9 - Intestinal and Urogenital Parasites
- 10 - Intestinal and Urogenital Parasites
- 11 - Minor Protozoan Pathogens
- 12 - Cestodes and Trematodes
- 13 - Nematodes
- 14 - Ectoparasites

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## Teaching and Learning Methods

- 1 - The course will utilize different teaching and learning methods to achieve the course objectives. For each session the instructor will give an overview of the session and then discussion, group work, presentations and assignments will be carried out with an active participation of students. The students will also be asked to reflect on the readings and handouts from each session.

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## Teaching and Learning Methods for the Disabled Students

- 1 - No Disabled students
- 2 - Warren Levinson (2010). Review of Medical Microbiology & Immunology. Department of Microbiology and Immunology. University of California, San Francisco. The McGraw-Hill Companies, Inc
- 3 - Handouts and other references and materials will be assigned for each session. The students are also required to obtain different articles and course materials as part of the course work and assignments.