

نموذج رقم (١٢)

جامعة: Mansoura

كلية: Nursing

قسم: Community Health Nursing

توصيف مقرر دراسي

١ - بيانات المقرر		
1 st Level 2 nd semester	الفرقة/المستوى:	Microbiology and Immunology اسم المقرر: ميكروبيولوجى والمناعة الطبية
1 credit hour 1 credit hour	نظري عملي	عدد الساعات الدراسية: B.Sc. in Nursing credit hour system
		الرمز الكودى: MSc . 205
		التخصص:

<p>This course aims to equip nursing students with basic knowledge and skills of microbiology & immunology. Course topics will include: The nature and principles of detecting pathogenic microorganisms, namely bacteria, viruses, and fungi, structure and function of microorganisms, host-pathogen interactions, immunological principles, antimicrobial agents and resistance, specimen collection and aseptic technique.</p>	٢ - هدف المقرر:
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٣ - المستهدف من تدريس المقرر :	
<p>A1. Identify the components of the human immune system A2. Explain the immunological responses to infectious diseases A3. Describe the mechanisms of human hypersensitivity reactions A4. Describe the basic properties of pathogenic microorganisms A5. Identify the major human pathogens including bacteria, viruses, and fungi A6. Explain basic principles of detection and diagnosis of infections, including specimen collection A7. Identify the various types of bacterial infection A8. Describe the basics of antimicrobial agents and resistance</p>	أ - المعلومات والمفاهيم:
<p>B1. Correlate according to evidence the causal relationship of the microbes and the diseases B2. Categorizes types of microorganisms as a bacterium, virus and fungi.</p>	ب - المهارات الذهنية الخاصة بالمقرر:

<p>B3. Synthesizes knowledge derived from microbiology course for the development of decision making in practice.</p> <p>B4. Predict the dangerous of handling and use of infectious agents in health care settings as a part of ethical heritage.</p> <p>B5. Integrate the results obtained from health assessment and laboratory diagnostic tests to formulate meaningful diagnostic reports</p>	
<p>C1. Uses the prophylactic control and therapeutic measures related to the various microbes.</p> <p>C2. Examine the human specimen for microbial infection</p> <p>C3. Practice safety measures when handling infectious materials</p> <p>C4. Implement standardized guidelines when handling collecting and transporting of specimens for microbiological examination.</p> <p>C5. Apply the principle of bio-safety measures and aseptic precautions in healthcare settings</p> <p>C6. Identify the different types of microorganisms by using laboratory techniques</p>	<p>ج- المهارات المهنية الخاصة بالمقرر:</p>
<p>D1. Use appropriate interpersonal communication skills</p> <hr/>	<p>د- المهارات العامة:</p>
<p><u>Unit I: Medical microbiology</u></p> <ul style="list-style-type: none"> • Bacteriology • Virology • Mycology • Types of infections <p><u>Unit II: Immunology</u></p> <ul style="list-style-type: none"> • Introduction to immunology • Types of immunity • Immune response • Antigen / Antibody reaction • Immunoglobulin <p><u>Unit III: Specimen collection & aseptic technique</u></p> <ul style="list-style-type: none"> • Safety and General Laboratory Instructions • Safety measures of handling samples • Disinfection and Sterilization • Specific organisms and their identification techniques 	<p>٤- محتوى المقرر:</p>

<ul style="list-style-type: none"> • Specimen requirements • Morphology of bacteria (Simple stain & Gram stain) • Different types of culture media • Culture media: growth characteristics and amounts • Microbiological techniques(inoculation) • Smear Preparation & Ziehl–Neelsen stain • Microscopic identification & examinations • Disc Diffusion Susceptibility Methods • Antibiotic & culture sensitivity <p>Unit IV: Applied immunology</p> <ul style="list-style-type: none"> • Agglutination Reactions • Haemagglutination • Blood Groups • Cross Matching • Serial Dilution • Antiglobulin Test (Coomb test) • ELISA 	
<p>1- Interactive Lectures</p> <p>2- Laboratory training</p>	<p>٥- أساليب التعليم والتعلم :</p>
<p>Not applicable</p>	<p>٦- أساليب التعليم والتعلم للطلاب ذوي القدرات المحدودة :</p>
<p>٧- تقويم الطلاب:</p>	
<p>1- Semester summative evaluation:</p> <p>a- Semester practical exam</p> <p>b- Semester written exam</p> <p>2- Final summative assessment:</p> <p>a- Oral exam</p> <p>b- Final written exam</p>	<p>أ- الأساليب المستخدمة:</p>
<p>Semester summative assessment</p>	
<p>Practical exam</p>	<p>9th week</p>
<p>Semester written exam</p>	<p>9th week</p>
<p>1- final summative assessment</p>	
<p>Oral exam</p>	<p>15th week</p>

Final written exam	16 th week	
1-Semester summative assessment		ج- توزيع الدرجات:
a- Laboratory performance	40 (20%)	
b- Semester written exam	20 (10%)	
2- Oral exam	40 (20%)	
3- Final written exam	100 (50%)	
Total	200 (100%)	
٨- قائمة الكتب الدراسية والمراجع :		
_____		أ- مذكرات
_____		ب- كتب ملزمة:
<ul style="list-style-type: none"> Hannigan B, Pallister C. Biomedical Science Explained Immunology. UK: Arnold Company, 2000. Spicer W. Clinical Bacteriology, Mycology and parasitology. Eclinburgh: churrchill livingston, 2000. Arora/Arora :Microbiology for Nurses & Allied Sciences, CBS Publishers & Distributors (2007) 		ج- كتب مقترحه:
<ul style="list-style-type: none"> http://www1.ethz.ch/microbiol/lectures/Immunology 		د- دوريات علمية أو نشرات .. الخ

Dr. Mona Emad El- Din

Assistant. Prof Dr. Amel I Ahmed

أستاذ المادة:

رئيس مجلس القسم العلمي: