

نموذج وصف المقرر

وصف المقرر

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهنناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولا بد من الربط بينها وبين وصف البرنامج؛

المؤسسة التعليمية	1. كلية الطب/جامعة القادسية College of Medicine /AL-Qadisiyah University
القسم العلمي / المركز	2. الاحياء المجهرية Medical Microbiology
اسم / رمز المقرر	3. MPM365
أشكال الحضور المتاحة	4. يومي
الفصل / السنة	5. الفصل الأول والفصل الثاني 2016/2015
عدد الساعات الدراسية (الكلي)	6. 5 ساعة اسبوعياً
تاريخ إعداد هذا الوصف	7. 2017
أهداف المقرر	8.
<u>Aim of the Course</u>	
1.To educate students about the basic features of general bacteriology, virology and mycology and to provide students with an understanding of the immune system, its protective functions and its role in the patho-physiology of infectious and non- infectious diseases	
2.To familiarize students with the common infections and diseases of medical importance, their microbial causes, as well as laboratory diagnosis, treatment, prevention and control of such diseases.	
3.To enable the students to practice the principles of sterilization and infection control.	

10. مخرجات المقرر وطرائق التعليم والتعلم والتقييم (Intended Learning Outcome)

Knowledge and Understanding

أ- الأهداف المعرفية

- 1-Illustrate general bacterial morphology, physiology and genetics.
- 2-Understand the host parasite relationship and microbial pathogenesis.
- 3 -Explain the physiology of the immune system, its beneficial role, as well as its detrimental role in hypersensitivity, autoimmunity and transplant rejection.
- 4 -Describe the morphology, culture, antigenic structure and virulence factors of microorganisms of medical importance.
- 5-Recognize the most important infectious clinical conditions and outline the diagnosis, treatment, prevention and control of the most likely organisms causing such diseases.
- 6- Describe the most important methods of decontamination and principles of infection control
Understand the impact of molecular technology in microbiology and immunology.

Practical Skills

ب - الأهداف المهاراتية الخاصة بالمقرر.

1. Identify medically important bacteria based on microscopic examination of stained preparations.
2. Perform a Gram stain and a Ziehl-Neelsen stain and identify, according to morphology and characteristics, stained preparations.
3. Identify culture media and biochemical tests commonly used for bacterial identification and distinguish positive and negative results.
4. Perform hand wash and control of steam sterilization.
- 5.

Teaching and Learning Methodes

طرائق التعليم والتعلم

1. Lecture
2. Practical class
3. Small group discussion with case study and problem solving
4. Quiz

Students Assessment

طرائق التقييم

Written Examination: Assessment of knowledge and understanding and intellectual skills.

Practical Examination: A. Assessment of practical skills.

B. Intellectual skills

- a. Station
- b. Objective Structured Test (OST)
- c. Photos
- d. Report

General Intellectual Skills

ج- الأهداف الوجدانية والقيمية

- 1- Interpret results of microbiological, serological and molecular tests.
- 2- Formulate a systematic approach for laboratory diagnosis of common infectious clinical conditions and select the most appropriate and cost-effective tool leading to the identification of the causative organism.
- 3- Evaluate according to evidence the causal relationship of microbes and diseases
- 4- Categorize a microorganism as a bacterium, virus or fungus according to standard taxonomy
- 5- Report and appraise a concise scientific activity according to standard scientific thinking and integrity
- 6- Appreciate the danger of handling and use of infectious agents on community and environment as a part of their ethical heritage

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د - المهارات العامة والتأهيلية المنقولة (المهارات الأخرى المتعلقة بقبالية التوظيف والتطور الشخصي).

د1- تاهيل الطالب كمخرجات لتغذية المؤسسات الصحية باطباء اكفاء

د2- تاهيل الطالب لاكتساب مهارات تؤهله لان يكون طبيب ناجح

د3- تطوير مهارات وقدرات الطلبة المتفوقين لاكمال دراستهم العليا مستقبلا

First Semester(Microbiology I):

Subject	Theory	Hours	Practical	Hours
Total		45		30
General Microbiology	The science of Microbiology Introduction.	1	Laboratory safety	2
1st Week	Host parasite relationship.	1	Laboratory methods for Identification of Bacteria and sample collection	2
	Specific and nonspecific immune response	1	SGT Collection and handling of samples.	2
2nd & 3rd Week	General properties and classification of bacteria	2	Sterilization and Disinfection	2
	General properties and classification of viruses	2	Bacterial staining Methods	2
	Bacterial cell wall	2	Bact.culture and Sensitivity	1
4th & 5thWeek	Bacterial Physiology and Metabolism	2	Bacterial biochemical tests.	2
6th Week	Cells of immune response	2	SGT (Traditional and Newer bacterial culture methods)	2
	Replication of viruses	2		
	Bacterial genetics	2	Antigene – antibody reaction+separati on of immune cells	2
	Structure and classes of immunoglobulin	1		
7th & 8th Week	Viral pathogenesis	2	Methods for Viral Diagnosis	2
	Bacterial pathogenesis	4		
9th &10th	Humoral Immunity - Antibody Mediated Immunity and Cell Mediated Immunity	2	SGT Bacterial	

Week			Biofilm	2
	Antimicrobial Agents, antibiotics and resistance.	4		
11 th Week	Normal flora.	1	DNA Extraction PCR	2
	Complement System.	2	Antibiotics resistance.	2
12 th Week	General properties of Fungi.	3		
13 th Week	Viral vaccines.	1		
	Immunity to infections	2	Methods for Fungal diagnosis	2
14 th Week	Methods useful for diagnosis of Infections: microbiology, imaging, serology.	3		
15 th Week	Mid Term Examination	1.5		
	Practical Examination			2
Subject	Theory	Hours	Practical	Hours
Total		45		30
Bacteriology	Pyogenic cocci		Pyogenic cocci	4
	Staphylococcal Streptococcal Neisseria			
	Corynaebacterium	2		2
	Enteric bact. Part I (E.coli,Klb.,prot.,pseud o.)	2	Enteric bact. Part I Practical	2
	Enterobacteriace Part II Salmonella , shigella, brucella, Cholera	2	Enterobacteriace Part II Practical	2
Mycobacterium	2	Cholera	2	

Immunology				workshop		
	Genus bacillus		2			
	Chlamydia, Mycoplasma Spirocheates	Allergy	3	Hospital acquired infections (Nosocomial Infections) Workshop	2	
	hypersensitivity actions I hypersensitivity reactions II hypersensitivity reactions III hypersensitivity reactions IV		2			
	Immune tolerance & autoimmunity			2	SGT	2
	Immune deficiency states: congenital and acquired			1		
	Cytokins		1			
	HLA		1			
	Tumor immunity	Tumor marker		2		
	Virology	Influenza viruses	Antiviral drugs		2	
		paramyxoviruses			1	SGT URTI/LRTI
		Enteric viruses & Rhinovirus group			1	
		Herpes viruses			2	SGT Viral gastroenteritis
Hepatitis viruses A & E				1		
Hepatitis viruses B, C & D				1		
Retro virus ; (AIDS)				1	SGT HIV infection	
Rabies & other				1		

<i>Mycology</i>	neurotropic viruses				
	HPV ,Pox & Parvo virus		1		
	Mid Term Examination		2		
	Practical Examination				4
	Actinomyces Nocardia	Antifungal drugs		2	
	Candidiasis & Cryptococcosis		1	Laboratory diagnosis of Candida	2
	Dermatophytes		1		
	Miscellaneous fungi : Aspergillosis ,Mucor ,Rhizopus		1		
	systemic mycosis; Histoplasmosis		1		

Facilities used for teaching this course include

12- التحتية البنية

Lecture halls
Data shows & computer assistance, Laboratories (with sinks)

Basic Materials:

- Department books available for students, at the faculty bookshop

1- الكتب المقررة المطلوبة

Jawetz, Melnick&Adelberg's Medical Microbiology, Brooks, Butel and Morse. Cal Books/McGraw-Hill Publishers.

2- المراجع الرئيسية (المصادر)

Suggested materials

- 1 . Basic and Clinical Immunology, Stites, Stobo, Fudenberg and Wells. Lange Medical Publishing.
2. Clinical Immunology, Brostoff, Scadding, Male and Roitt. Gower Medical Publishing.
3. Immunology, Roitt, Brostoff and Male. Gower Medical Publishing.

ا- الكتب والمراجع التي يوصى بها (المجلات العلمية , التقارير ,)

Biology Web Site References:

- o asmnews@asmusa.org
- o <http://www.phage.org/black09.htm>
- o http://www.microbe.org/microbes/virus_or_bacterium.asp
- o <http://www.bact.wisc.edu/Bact330/330Lecturetopics>
- o http://whyfiles.org/012mad_cow/7.html
- o <http://www.microbelibrary.org/>
- o <http://www.hepnet.com/hepb.htm>
- o http://www.tulane.edu/~dmsander/Big_Virology/BVHomePage.html
- o <http://www.mic.ki.se/Diseases/c2.html>
- o <http://www.med.sc.edu:85/book/welcome.htm>
- o http://www.biology.arizona.edu/immunology/microbiology_immunology.html

ب - المراجع الالكترونية, مواقع الانترنت

- 1.Focus on host- parasite relationship, causal relationship, critical thinking and scientific integrity.
2. Applied microbiology and safe handling: ethical issues and responsibilities.
3. Reporting and communicating: 2 ways channel.
4. Categorizing according to taxonomy and self learning.

اعداد

ا.م.د. منال محمد كاظم

ا.د. عدنان حمد عبيد الحمداني

وزارة التعليم العالي والبحث العلمي
جهاز الاشراف والتقويم العلمي
دائرة ضمان الجودة والاعتماد الاكاديمي

استمارة وصف البرنامج الاكاديمي للكليات والمعاهد

الجامعة : القادسية

الكلية : الطب

القسم العلمي : الاحياء المجهرية

تاريخ ملئ الملف :

التوقيع :

اسم المعاون العلمي : ا.د. حمادي عبطان هادي

التاريخ : 2017/2/15

التوقيع :

اسم رئيس القسم : ا.د. عدنان حمد الحمداني

التاريخ : 2017/2/15

دقق الملف من قبل

شعبة ضمان الجودة والاداء الجامعي

اسم مدير شعبة ضمان الجودة والاداء الجامعي :

التاريخ :

التوقيع :

مصادقة السيد العميد