Republic of Iraq Fhe Ministry of Higher Education & Scientific Research



University:Al-Muthana College:Science Department:Biology Stage:Fourth Lecturer name:Maitham abas makei Academic Status:Assist.Professor Qualification:Msc Place of work: Al-Muthana University/ College of Science.

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## **Teaching plan for the semester form2021-2022**

Course Instructor	Maitham abas Makei						
E_mail	Maitham.abas@yahoo.com						
Title	Pathogenic bacteria						
Course	(15) week, two hours per week (theoretical part).						
Coordinator	(15) week, two hours per week (practical part).						
Course Objective	explain relationship between human and bacteria explain some of Some Medically Important Bacteria						
Course Description	An Outline History of Microbiology and Infection, Glossary, Normal Flora in Human, Some of the virulence factors in bacteria, The infection process, Some Medically Important Bacteria.						
Textbook							
References	Review of medical microbiology . Jawetz. Lange Medical Microbiology, 24th Edition: Jawetz, Melnick, & Adelberg; McGraw-Hill Medical 2007.						
Course Assessment	Term Tests	Laboratory	Quizzes	Project	Final Exam		
General Notes	Type here general notes regarding the course						

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week	Date	<b>Topics Covered</b>	Lab. Experiment	Notes
1		Introduction, An Outline History of Microbiology and Infection, Glossary.	Assignments Growth on agar plate. Measurement of Cell Mass. Media for Bacterial Growth.	
2		Normal Flora in Human, Factors influence normal flora, Infection of the host by normal flora, Normal flora of different parts of the human body, Bacterial Pathogenicity.	Staining: simple staining, Differential Staining,	
3		Virulence Factors, Some of the virulence factors in bacteria, Bacterial Toxins.	Staining: simple staining, Differential Staining,	
4		The infection process, Entry into the Human Body, Sites of Entry.	<i>Staphylococcus aureus:</i> Lab. diagnostic test	
5		Some Medically Important Bacteria: Staphylococcus: Cluster- Forming Gram +ve cocci, <i>Staphylococcus aureus</i> : Morphology and culture characters, <i>S. aureus</i> infections, Biochemical characters, Diagnosis.	Streptococcus pneumoniae Lab. diagnostic test	
6		Streptococcus and Enterococcus: Classification of Streptococci, Streptococcus Pyogenes: Enzymes & toxins, Pathogenicity, Lab Diagnosis, Streptococcus agalactiae	<i>Bacillus anthracis</i> : Lab. diagnostic test	
7		Non- beta haemolytic Streptococci: Streptococcus pneumoniae Viridans Streptococci	<i>Neisseria gonorrhoeae</i> : Lab. diagnostic test	
8		Genus: Enterococcus (Fecal Streptococcus):- Enterococcus Faecalis, Enterococcus faecuim	Enterobacteriaceae: Escherichia coli: Lab. diagnostic test	
9		The Gram positive spore- forming rod: Bacillus anthracis:General characters, PathogenicityBacillus subtilis, Bacillus cereus	<i>Klebsiella Pneumoniae</i> : Lab. diagnostic test.	
10		Neisseria, Moraxella: (Gram –ve cocci): Neisseria meningitides: Pathogenicity, Lab diagnosis, Neisseria gonorrhoeae: Pathogenesis, Lab. Diagnosis. Moraxella: Moraxella catarrhalis	<i>Salmonella</i> : Lab. diagnostic test.	
11		Gram-Negative Rods (Enterobacteriaceae): Escherichia coli, E.coli in human infections.	Shigella: Lab. diagnostic test.	
12		Klebsiella: The virulence factors of Klebsiella. <i>Klebsiella</i> <i>Pneumoniae</i> ( <i>K. aerogenes</i> ): Lab diagnosis	Proteus: Lab. diagnostic test.	
13		Salmonella: Morphology, Pathogenesis, Diagnosis,	Pseudomonas: Lab. diagnostic test.	
14		Shigella: Morphology& Characteristics, Pathogenicity, Diagnosis. Genus: Proteus: Identification, Pathogenicity	<i>Vibrio cholera</i> : Lab. diagnostic test.	
15		Pseudomonas: Characteristics, Pathogenicity, Diagnosis. Genus: Vibrio: Vibrio cholera, Pathogenesis, Lab Diagnosis,	Exam	

**Instructor Signature:** 

Dean Signature:Maitham A.Makei