

# Ministry of Higher Education and Scientific Research Republic of Iraq

**University: University Of Basrah** 

College: Science

**Department: Pathological Analyses** 



Year: 2021-2022 Semester: First

SYLLABUS: MEDICAL BACTERIOLOGY	
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Hours: 3	Office: Iraqi Ministry of Higher Education and Scientific Research
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#### **COURSE OVERVIEW**

THIS COURSE PROVIDES ABASIC INTRODUCTION TO THE HUMAN BODY SYSTEMS AND THE DISEASES CAUSED BY SOME BACTERIAL PATHOGENS.

#### **GOALS AND OBJECTIVES**

- Identify the types of pathogenic bacteria that cause infectious diseases in humans.
- Preparing the student scientifically in the field of diagnosing medical bacteria.
- Identify the different types of analyzes to detect pathogenic bacteria.

#### **TEXTBOOK AND READINGS**

[1] Diagnostic Microbiology 13<sup>th</sup> ed.Bailey and Scotts.

[2]Microbiology 15th ed. Prescott

### **COURSE ASSESSMENTS**

The course grade ( 4 points ) will be based on the following elements:

	Points
Exams	85
Participation	10
Attendance	5

Assignments 100

## COURSE DESCRIPTION AND ASSIGNMENT SCHEDULE

This NO. -credit hour course is 14 weeks long. You should invest NO. hours every week in this course.

wĸ	DATE	TOPIC	READING	ASSIGNMENT
1		<ul> <li>Medical bacterial terminology</li> <li>Specimen management</li> <li>General concepts for specimen collection and handling</li> <li>Appropriate collection techniques</li> <li>Specimen transport</li> <li>Specimen preservation</li> <li>Specimen storage labeling</li> <li>Specimen requisition.</li> </ul>		
2		REJECTION OF UNACCEPTABLE SPECIMENS     SPECIMEN PROCESSING     DIRECT MICROSCOPIC EXAMINATION     SELECTION OF CULTURE MEDIA     INOCULATION ON SOLID MEDIA     INCUBATION CONDITIONS     Collection, Transport, Storage, and Processing of some Specimens		
3		Infection of Digestive System part 1		
4		Infection of Digestive System part 2  THE SHIGELLAE  Morphology and Identification  Pathogenesis and Pathology  Diagnostic Laboratory Tests and treatment  Escherishia coli  E coli—associated diarrheal diseases  Helicobacter pylori  Morphology and Identification  Pathogenesis and Pathology  Diagnostic Laboratory Tests  Campylobacter jejuni  Morphology and Identification  Pathogenesis and Pathology  Diagnostic Laboratory Tests		
		45.00		Assignment 1
5		<ul> <li>Respiratory Tract (R.T)</li> <li>ANATOMY</li> <li>Normal Microbiota of the Respiratory</li> <li>System</li> </ul>		

	1	_	
		Upper R.T. infection .	
		Lower R.T. infection.	
		Streptococcus     Compared share stepristics	
		General characteristics     Beta homolytic strontococci	
		Beta hemolytic streptococci     Virulence Factors Spectrum of	
		Virulence Factors Spectrum of Diseases and infections	
		Therapeutic Options     Diagnostic laboratory tosts	
		Diagnostic laboratory tests     Treatment	
		MYCOBACTERIUM TUBERCULOSIS	
		Pathogenesis	
		Primary Route of Transmission	
6		Specimen collection and transport	
		Antimicrobial susceptibility testing	
		and therapy	
		Corynebacterium diphtheriae	
		General charecterstics	
		Morphology and Identification	
		Pathogenesis and Spectrum of	
		Diseases	
7		Virulence Factors	
		Pathology	
		Laboratory diagnosi1s	
		Morphology and Identification	
		Antimicrobial susceptibilities	
		Staphylococci	
		Virulence factor	
		Pathogenesis	
		Morphology and identification	
		Diagnostic Laboratory Tests	
8		Susceptibility Testing	
		Bordetella pertussis	
		Pathogenesis	
		Morphology and Identification	
		Diagnostic Laboratory Tests	
		Treatment	
			Assignment 2
		Streptococcus pneumoniae	
		Klebsiella pneumoniae	
9		Legionella pneumophila	
		•	
		Skin, Soft Tissue, and Wound	
		Infections	
		Anatomy of the skin	
		Resident Microbial Flora of the	
		Skin	
		SKIN AND SOFT TISSUE INFECTIONS	
10		INFECTIONS OF THE EPIDERMIS AND	
		DERMIS	
		INFECTIONS OF THE SUBCUTANEOUS  TISSUES	
		INFECTIONS OF THE MUSCLE FASCIA	
		INFECTIONS OF THE MUSCLE FASCIA     AND MUSCLES	
		AIND IVIUSCLES	
		WOUND INFECTIONS( postoperative,	
		bite and burn wounds)	
11		LABORATORY DIAGNOSTIC	
		PROCEDURES INFECTIONS OF THE EPIDERMIS	
		OLD ONES HAT ECTIONS OF THE EFIDERIAND	

	AND DERMIS	
	LABORATORY DIAGNOSTIC	
	PROCEDURES INFECTIONS OF WOUND	
	INFECTIONS	
	PSEUDOMONAS AERUGINOSA	
	Morphology and Identification	
	Pathogenesis	
	Clinical Findings	
	Diagnostic Laboratory Tests	
	Treatment	
	Genital Tract Infections	
	RESIDENT MICROBIAL FLORA      R	
	SEXUALLY TRANSMITTED DISEASES	
	AND OTHER GENITAL TRACT INFECTIONS	
12	GENITAL TRACT INFECTIONS	
	LABORATORY DIAGNOSIS OF GENITAL	
	TRACT INFECTIONS LOWER GENITAL TRACT	
	INFECTIONS	
	Urethritis, Cervicitis, and Vaginitis	
	Neisseria gonorrhea	
		Assignment 3
	Urinary system	
	Urine	
13	Proper Collection of Specimen	
	B. B	
	Microscopic Examination	
	Culture	
	<ul><li>Culture</li><li>Expected pathogens</li></ul>	
	<ul> <li>Culture</li> <li>Expected pathogens</li> <li>Infection of central nervous system</li> </ul>	
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	Culture     Expected pathogens     Infection of central nervous system     ANATOMY     Cerebrospinal Fluid     ROUTES OF INFECTION     DISEASES OF THE CENTRAL NERVOUS SYSTEM     Meningitis	
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Is it possible to develop the curriculum <within 20%="" authority="" teaching="" the=""> to include vocabulary that serves sustainability</within>		
1- Yes, it is possible (point an appropriate aspect)	Developing life – long learning and education Sustainable development	
appropriate aspect)	Development of general Health	
	Gender Equality	
	Efficiency of medicine and public health	

	Mechanisms for obtaining good health and well-being
2- Suggest aspect that serves	
sustainability	