



## Module (Course Syllabus) Catalogue

2022-2023

College/ Institute	Koya Technical Institute	
Department	Medical Laboratory Technology	
Module Name	Medical Microbiology	
Module Code	MEI404	
Degree	Technical Diploma <input type="checkbox"/>	Bachelor <input type="checkbox"/>
	High Diploma <input type="checkbox"/>	Master <input type="checkbox"/>
		PhD <input type="checkbox"/>
Semester	4	
Qualification	Master	
Scientific Title	Assistant lecture	
ECTS (Credits)		
Module type	Prerequisite <input type="checkbox"/>	Co <input checked="" type="checkbox"/> Assist. <input type="checkbox"/>
Weekly hours	4	
Weekly hours (Theory)	( 2 )hr Class	( 3 )Total hrs Workload
Weekly hours (Practical)	( 2 )hr Class	( 1 )Total hrs Workload
Number of Weeks		
Lecturer (Theory)	Shno Abdalqadir Sofi	
E-Mail & Mobile NO.	Shno.sofi@epu.edu.iq	
Lecturer (Practical)	Shno Abdalqadir Sof Glena Qasim	
E-Mail & Mobile NO.	Glena.qasim@el.epu.edu.iq	
Websites		

## Course Book

<b>Course Description</b>	<p><b>Course overview:</b> Medical microbiology is both a branch of medicine and microbiology which deals with the study of microorganisms including bacteria, viruses, fungi and parasites which are of medical importance and can cause diseases in human beings. It includes the study of microbial pathogenesis and epidemiology and is related to the study of disease pathology and immunology. Microorganisms have a tremendous impact on all life and the physical and chemical makeup of our planet. They are responsible for cycling the chemical elements essential for life. This course will introduce students to the microbial species that cause human disease.</p>			
<b>Course objectives</b>	<p><b>Course objective:</b> The aims of this course are to establish the student pharmacist's foundation in the principles of medical microbiology, immunology and virology that will build upon the knowledge and skills gained in the patient assessment course sequence. In order to successfully manage a patient with an infectious disease, the student pharmacist must first understand the role of the host's immunologic response and the burden of disease caused by clinically important pathogens. The content in this course will lay the foundation for the subsequent patient care series where the pharmacology and medicinal chemistry of anti-infective agents and pharmacotherapy of infectious diseases will be learned and applied to optimize the care of a patient.</p>			
<b>Student's obligation</b>	<p>The students should be attendance and participate in class activity. The lectures have showed by them through presentations and practical activity and required to do the all exams and quizzes. The ideas that develop the course are the students make circle in class to discuss the subjects of the day and use materials for practical skills.</p>			
<b>Required Learning Materials</b>	<p>Lecture halls with data show equipment for lecture presentations, white board, overhead projector, posters.</p>			
<b>Evaluation</b>	<b>Task</b>	<b>Weight (Marks)</b>	<b>Due Week</b>	<b>Relevant Learning Outcome</b>
	Paper Review			
	Assignme Homework	5%		
	Class Activity	2%		
	Report	5%		

	Seminar	5%		
	Essay			
	Project			
	Quiz	8%		
	Lab.report	10%		
	Midterm Exam	25%		
	Final Exam	40%		
	Total	100% (100 Marks)		

<b>Specific learning outcome:</b>	<p align="center"><b>- Specific learning outcome:</b></p> <p>Different forms of teaching will be used to reach the objectives of the academic year:</p> <p>1-Power point presentation.</p> <p>2-Worksheets will be designed to let the chance for practicing on several aspects of the course in the class room.</p> <p>3-Student will be asked to prepare research papers on selective topics and summaries articles content.</p> <p>4-There will be classroom discussions, solve, analyze and evaluate problem sets, and different issues discussed throughout the year.</p> <p>5-Lecture notes are fore supporting the reading material including the hands-out.</p>			
-----------------------------------	---	--	--	--

<b>Course References:</b>	
---------------------------	--

Course topics (Theory)	Week	Learning Outcome
Gram Positive Pathogenic Bacteria ( <i>Staphylococcus</i> species)	1	. General characteristic of <i>Staphylococcus</i> , important pathogenic species and their harms on human.
Gram Positive Pathogenic Bacteria ( <i>Streptococcus</i> species).	2	General characteristic of <i>Streptococcus</i> , important pathogenic species and their harms on human
<i>Clostridium spp.</i> (Characteristic, Pathogenicity, Diagnosis.....et).	3	General characteristic of <i>Clostridium</i> of bacteria , important pathogenic species and their harms on human
Enterobacteriaceae, <i>E. coli.</i> (Characteristic, Pathogenicity, Diagnosis.....et).	4	General characteristic of <i>E. coli.</i> ,important pathogenic

		species and their harms on human
<i>Salmonella</i> (Characteristic, Pathogenicity, Diagnosis.....et).	5	General characteristic of <i>Salmonella</i> , important pathogenic species and their harms on human
<i>Shigella</i> (Characteristic, Pathogenicity, Diagnosis.....et).	6	General characteristic of <i>Shigella</i> , important pathogenic species and their harms on human
Medically importance <i>Haemophilus influenza</i> (definition, characteristic, diseases, identification.....et).	7	General characteristic of <i>Haemophilus</i> i,important pathogenic species and their harms on human.
<i>Brucella</i> (Characteristic, Pathogenicity, Diagnosis.....et	8	General characteristic of <i>Brucella</i> , important pathogenic species and their harms on human.
Visit of students to diagnostic laboratories in the hospitals of the Ministry of Health	9	
discussion of reports	10	Student's Activity
Daily examine	11	.
Final Exam	12	

### Questions Example Design

#### Examinations (question design):

Theory Questions:

Practical Question:

Multiple choice

The common word for bacteria which are rod in shape is

A. Cocci B. Bacilli C. Spirilla D. Pleomorph

Enumerating

Enumerate antigens of *Streptococcus*

Answer the following

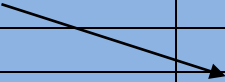
Difference between *Clostridium perfringens* and *Clostridium tetani*

**Filling blanks**

*Staphylococcus* is term means .....

Q/ match the column A with column B?

Questions (A)	Answers (B)



Q/ Write (True) for true sentences and (False) for the false sentences and correct the falses?

**Extra notes:**