

Kurdistan Region Government Ministry of Higher Education and Scientific Research Erbil Polytechnic University



## Module (Course Syllabus) Catalogue

## 2023-2024

College/ Institute	Koya Technical Institute			
Department	Midwifery			
Module Name	Microbiology			
Module Code	MIC205			
Degree	Technical Diploma 🔹 Bachelor			
	High Diploma Master PhD			
Semester	2			
Qualification				
Scientific Title	Lecturer			
ECTS (Credits)	6			
Module type	Prerequisite Core Assist. *			
Weekly hours				
Weekly hours (Theory)	( 2 )hr Class ( 2 )Total hrs Workload			
Weekly hours (Practical)	( 2 )hr Class ( 2 )Total hrs Workload			
Number of Weeks	12			
Lecturer (Theory)	Ayad Kareem Ali			
E-Mail & Mobile NO.	ayad.ali@epu.edu.iq 0750461824			
Lecturer (Practical)	Mr. Muhamad +Mrs. Choman+ Mrs. Talar			
E-Mail & Mobile NO.				
Websites				

## **Course Book**

Course Description	<ul> <li>Microbiology helps a healthcare professional to have better understanding of these microorganisms so that a patient whose immune system lowers down and is always at risk of being affected by any microbe, can remain safe and healthy when he is in the hands of a nursing professional.</li> <li>Microbiology helps a nursing professional to understand the basic concepts of reproduction, morphology, biochemical characteristics and genetics.</li> <li>This subject is a comprehensive science it gives following knowledge about Microbiology:</li> <li>*General information about Microbiology.</li> <li>*Information about Virology</li> <li>* Information about Virology</li> <li>* Special information about microbial control.</li> </ul>			
Course objectives	The aim from this subject to give knowledge about Microbiology and then microbial control.			
Student's obligation	It is necessary all the students listen and write notes and their obligations throughout the academic year and the attendance and completion of all tests, exams. It should also practice in the laboratory or another place depending on the lecture.			
Required Learning Materials	lecture halls with data show equipment for lecture presentations, white board, overhead projector, posters.			
Evaluation	Task     Paper Review	Weight (Marks)	Due Week	Relevant Learning Outcome

		Homework	5		
	As	Class Activity	2		
	sign	Report	5		
	Assignments	Seminar	5		
	nts	Essay			
		Project			
	Qui	Z	8		
	Lab		15		
	Mic	lterm Exam	10		
	Fina	al Exam	40		
	Tot	al	100		
Specific learning outcome:	<ul> <li>2- Student must be learning features, diagnosis of bacteria.</li> <li>3 Student must be learning features, diagnosis of viruses</li> <li>4- Student must be learning features, diagnosis of fungi.</li> <li>5- Student must be learning how to control microbial organisms.</li> </ul>				
Course References:	<ol> <li>Microbiology Nina T. Parker, 2016</li> <li>Medical Microbiology: An Introduction to Infectious Diseases</li> </ol>				
	1984				
<b>Course topics (Theor</b>	<b>:y</b> )			Week	Learning Outcome
Introduction to Microbiology				First	Outcome
Classification of Microbiology				Second	
Bacteriology			Third		
Bacterial cell structure, Gram stain			Fourth		
Classification of bacteria 1- Shape 2- Flagella 3- Nutrient 4- Ph	ассо	rding to the:-		Fifth	

Classification of bacteria according to the:-	Sixth	
1- Temperature		
2- Oxygen		
Growth of bacteria	Seventh	
Virology	Eighth	
Features of viruse		
Control of microbiology	Ninth	
Medical microbiology	Tenth	
Staphylococcus spp.	Eleventh	
Bacillus spp.	Twelfth	
Practical Topics	Week	
Introduction to Microbiology	First	
Classification of Microbiology	Second	
Safety Procedures and Precautions in the		
Microbiology Laboratory		
LIST OF EQUIPMENT IN MICROBIOLOGY	Third	
LABORATORY		
Types of culture media used in microbiology	Fourth	
SMEAR PREPARATION	Fifth	
COMMON STAINING TECHNIQUE	Sixth	
Simple Staining		
DIFFERENTIAL STAINS	Seventh	
Gram Staining		
ACID-FAST STAINING	Eighth	

Catalase test	Ninth	
Coagulase test	Tenth	
Haemolysis test	Eleventh	
Review	Twelfth	
Questions Example Design		
<b>Q</b> \Enumerate		
Q\ write feature		
Extra notes:		
External Evaluator		