KNOWLEDGE UNIVERSITY

Ministry of Higher Education and
Scientific Research
Kurdistan Region – Iraq

A COURSE MODULE DESCRIPTOR FORM

(Course Book)

Module Information			
Course Module Title	**Medical Microbiology**		
ناوه كۆرس مۆديول	ناوی فەرمی ئەم بابەتە بە كوردی		
عنوان الوحدة	علم الاحياء المجهرية		
Course Module Type	Type B, C, R, E	**Module Code**	KNUxxxxx
ECTS Credits	Type a number	**Module Level**	Type a number
Semester of Delivery	Type a number	**Dept. Code**	Type Dept. Code
College (Code)	College of Science (code)		
Module Website (CMW)	e.g. sites.knu.edu.iq/knuxxxxx		
Module Leader (ML)	Who is responsible for this Module (Module Leader)		
e-mail	Nyan.mohammed@knu.edu.iq		
ML Acad. Title	Assistant lecturer	**ML Qualification**	Msc.
ML ORCID	https://orcid.org/0000-0001-6536-9624		
ML Google Scholar Acc.	https://scholar.google.com/citations?hl=en&user=9zofe8kAAAAJ		

Course Module Tutor	Msc. Nyan Jasim Mohammed		
Module Tutor email	Nyan.mohammed@knu.edu.iq		
Date Approved	DD/MM/YYYY	**Version Number**	1.0

Relation With Other Modules	
Pre-requisites	
Module Aims, Learning Outcomes and Indicative Contents	
Module Introductory Description	The microbiology courses will provide opportunities for students to develop and communicate an understanding of microorganism such as bacteria, viruses, fungus and other prokaryotic organisms.
Module Aims	Concepts covered in this course include introduction to science of microbiology, classification, identification, pathogenesis, immunity and protection, the important medical microbes, soil microbes, natural water, sewage and

	atmosphere microbes, food and dairy products microbes, and industrial microbiology.
Module Learning Outcomes	The objectives of the program were developed under the function of health professions programs in the Division of medical laboratory techniques. In an attempt to provide theoretical background and develop a high degree of professionalism, the program developed the following objectives: 1. Provide students with the necessary educational expertise on genetics. 2. To provide the health care community at the national level with specialized personnel for high quality genetic testing. 3. Provide curricula that contain a balance between technical knowledge and clinical efficacy gained and their relationship to heredity 4. Help students reach their goals by providing academic and professional advice. 5. To instill in students a lifelong desire to achieve professional and academic excellence

Learning and Teaching Strategies	
Strategies	Type something like: The main strategy that will be adopted in delivering this module is to encourage students' participation in the exercises, while at the same time refining and expanding their critical thinking skills. This will be achieved through classes, interactive tutorials and by considering the type of simple experiments involving some sampling activities that are interesting to the students. ……

Module Delivery	
Structured workload (h/w)	
Unstructured workload (h/w)	
Total workload (h/w)	30h

Module Assessment

	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Quizzes	1 or 2	6% (6)	5 or 5, 10	
Assignments	2	6% (6)	At the start	
Projects / Lab.	1	12% (12) / 18% (18)	Continuous	
Midterm Exam	2 hr	36% (36) / 30% (30)	8	
Final Exam	3 hr	40% (40)	16	All
Total		100% (100 Marks)		

Learning and Teaching Resources

	Text	Available in the Library?
Required Texts		Yes
Recommended Texts		Yes
Websites	•	

Delivery Plan (Syllabus)	
	Material Covered
Week 1	The Science of Microbiology
Week 2	Cell structure and Classification of Bacteria
Week 3	The Growth, Survival, and Death of Microorganisms and Microbial Nutrition
Week 4	Cultivation of Microorganisms
Week 5	Microbial Metabolism
Week 6	Microbial Genetics

Week 7	Antimicrobial Drugs
Week 8	pathogenesis of Bacterial Infection
Week 9	Normal Human Microbiota
Week 10	Physical and Chemical Agents for Microbial Control
Week 11	Anaerobic bacteria
Week 12	Pathogenic Fungi.
Week 13	Microbial Toxins and their mode of actions
Week 14	Applied Microbiology
Week 15	**Preparatory Week**
Week 16	**Final Exam**

Course Keywords
Microbiology, Cell biology, Molecular Biology,

APPENDIX: (Help and Information)

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GRADING SCHEME				
Group	**ECTS Grade**	**% of Students/Marks**	**Definition**	**GPA**
Success Group (50 - 100)	**A -** Excellent	Best 10%	Outstanding Performance	**5**
	B - Very Good	Next 25%	Above average with some errors	**4**
	C - Good	Next 30%	Sound work with notable errors	**3**
	D - Satisfactory	Next 25%	Fair but with major shortcomings	**2**
	E - Sufficient	Next 10%	Work meets minimum criteria	**1**
Fail Group (0 – 49)	**FX** – Fail	(45-49)	More work required but credit awarded	
	F – Fail	(0-44)	Considerable amount of work required	
Note:				

NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. KNU has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

Useful Resource:

Designing Learning, From module outline to effective teaching

https://www.sun.ac.za/english/faculty/arts/Documents/Designinglearning.pdf