جمهورية العراق
وزارة التعليم العالي والبحث العلمي
جامعة القاسم الخضراء
كلية التقانات الاحيائية
قسم التقانات الاحيائية الطبية

نموذج وصف المادة الدراسية

Module Information **MODULE DESCRIPTION FORM** **معلومات المادة الدراسية**					
Module Title	**General microbiology**			**Module Delivery**	
Module Type	**Core**			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	UOMU037036				
ECTS Credits	**5**				
SWL (hr/sem)	**125**				
Module Level	**2**	**Semester of Delivery**	**3**		
Administering Department	**Medical Biotechnology**	**College**			
Module Leader	**Hasanain Khaleel Ibrahim**	**e-mail**	Hasanain.Khaleel.Ibrahim@uomus.edu.iq		
Module Leader's Acad. Title	**Professor**	**Module Leader's Qualification**	**Ph.D.**		
Module Tutor	**Name (if available)**	**e-mail**	**E-mail**		
Peer Reviewer Name	**Name**	**e-mail**	**E-mail**		
Scientific Committee Approval Date	**14/11/2025**	**Version Number**	**1.0**		

Relation with other Modules **العلاقة مع المواد الدراسية الأخرى**			
Prerequisite module	**Medical microbiology**	**Semester**	**4**
Co-requisites module	**None**	**Semester**	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives **أهداف المادة الدراسية**	1. This course is designed to give students not majoring in the essential background in Microbiology 2. Evolution to understand Microorganisms. 3. The material covered includes basic biological concepts and fundamental principles of Microbiology 4. The role of Microbial Virulence in various diseases 5. Recognized the relationship between Microorganisms and specific diseases 6.Control of Microorganisms 7. learning the Viruses Structure, Organization, Cultivation, and Viral Pathogenesis 8. Microbial Metabolism & Cellular Regulation 9. Understanding Antimicrobial Chemotherapy
Module Learning Outcomes **مخرجات التعلم للمادة الدراسية**	1. Give an introduction of Microbiology 2. List various experiments how to deal with microorganisms. 3. Summarize Traditional Approaches to the Study Microbial Disease 4. Explain and understanding the Virulence. 5. Discuss the metabolism of Microorganisms. 6. Define parental diagnosis and inherited diseases. 7. Identify the types of Microorganisms. 8. Illustrated the various methods how to control the microorganisms
Indicative Contents **المحتويات الإرشادية**	In lecture lab #1-#5 they will need (10hr). In lecture lab #7- #13 they will need (50 hr). In lecture lab #15 they will need (**10hr)**

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Report Writing, Field Visits, Theoretical Lectures, Scientific Films, Exploratory Work Teams

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ أسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	46	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	3
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	61	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	2
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	125		

Module Evaluation تقييم المادة الدراسية					
As		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	3	10% (10)	3,9,12	Lo#1,2,10, and11
	Assignments	2	10% (10)	13,14	Lo#3,4,6,and 8
	Projects / Lab.	1	10% (10)	Continuous	
	Report	1	10% (10)	15	#15
Summative assessment	Midterm Exam	1hr	10% (10)	8	#1_#8
	Final Exam	3hr	50% (10)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
Week	**Material Covered**
Week 1	**Introduction to microbiology**
Week 2	**Gram negative bacteria**
Week 3	**Gram positive bacteria**
Week 4	**Bacterial nutrition**
Week 5	**Microbial control**
Week 6	**Microbial genetics**
Week 7	**Microbial metabolism and cellular Regulation**
Week 8	**First Exam**
Week 9	**General characters of viruses**
Week 10	**Classification of viruses**
Week 11	**Oncogenic viruses**
Week 12	**Medically important fungi**
Week 13	**Medically important protozoa**
Week 14	**Normal microbial flora**
Week 15	**2nd.Exam**
Week 16	**Review**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
Week	**Material Covered**
Week 1	**Introduction and general instruction**
Week 2	**Microscope and Microscopy**
Week 3	**Microscopic slide technique**
Week 4	**Sterilization methods**
Week 5	**Culture media**
Week 6	**Counting microorganisms**
Week 7	**Isolation of pure cultures**
Week 8	**First exam**
Week 9	**Growing culture anaerbically**
Week1o	**Biochemical tests**
Week 11	**Antibiotic sensitivity tests**
Week 12	**Microbial isolation**
Week13	**Clinical specimens**
Week14	**Serology**
Week15	**Mycology**
Week16	**2nd. examination**

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	Foundationsin Microbiology, Fourth Edition, The McGraw-Hill, (2002) Jawetz, Melnick, & Adelberg's Medicalty Microbiology, Twenty-Fifth Edition, USA, McGraw-Hill Companies (2010) Required Texts ;.Harvey, Richard A.; Champe, Pamela C Fisher, Bruce D	Yes
Recommended Texts	Lippincott's Illustrated Reviews: Microbiology, 2nd Edition, Lippincott Williams & Wilkins. (2007)	No
Websites	related scientific papers (https://www.researchgate.net/publication/289980213)	

Grading Scheme مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks 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. The University 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.