

TISHK INTERNATIONAL UNIVERSITY
FACULTY OF APPLIED SCIENCE
Department of MEDICAL ANALYSIS,
-2022 Fall
Course Information for MA 211 GENERAL MICROBIOLOGY

Course Name: GENERAL MICROBIOLOGY					
Code MA 211	Regular Semester 3	Theoretical 2	Practical 2	Credits 3	ECTS 4
Name of Lecturer(s)- Academic Title:	Heshu Jalal - asst. lecturer				
Teaching Assistant:	..				
Course Language:	-				
Course Type:	Main				
Office Hours	2				
Contact Email:	Heshu.jalal@tiu.edu.iq Tel:750523333				
Teacher's academic profile:	MSc Medical microbiology BSc Medical microbiology				
Course Objectives:	Introduction to Microbiology is appropriate for students with some background in biology and chemistry whose career path intersects the study of microbes or simply have an interest in microbiology. This course introduces the basic principles of microbiology examining the microbes that inhabit our planet and their effect on the biosphere. Lecture topics explore the basic principles of microbiology and examine the microbes that inhabit our planet and their effect on the biosphere. Students will analyze the influence of microbiology and 21st century challenges and opportunities that arise from our changing relationship with and understanding of microbes.				
Course Description (Course overview):	This course offers a comprehensive study of the field of microbiology to science majors. The course will give detailed insights into five major themes: Structure and function of microbes (cellular structures, metabolism, and growth);, microbial genetics, microbial ecology, microbial diversity (prokaryotes, eukaryotes, viruses), and clinical microbiology (immunity, pathogenicity, epidemiology, control of microbes, and diseases).				

COURSE CONTENT

Week	Hour	Date	Topic
1	2	6-10/2/2022	introduction
2	2	13-17/2/2022	Fundamentals of Microbiology
3	2	20-24/2/2022	Fundamentals of Microbiology Cont.
4	2	27/2-3/3/2022	Scope of Microscopes
5	2	6-10/3/2022	Cell Structure and Functions
6	2	27-31/3/2022	Growth, Survival and Death of Microorganisms
7	2	3-7/4/2022	cont.
8	2	10-14/4/2022	Midterm Exam
9	2	17-21/4/2022	Bacteriology (Pathogenesis, Microbiota, Antimicrobials...)
10	2	24-28/4/2022	Virology (General properties, pathogenesis, Antivirals and Vaccines...)
11	2	8-12/5/2022	Parasitology (Classifications, Diagnosis...)
12	2	15-19/5/2022	Mycology (General Properties, Virulence, classifications...)
13	2	22-26/5/2022	Applied Microbiology
14	2	29/5-2/6/2022	Normal Human Microbiota

15	2	5-9/6/2022	Final Exam
16	2	12-16/6/2022	Final Exam
COURSE/STUDENT LEARNING OUTCOMES			
1	Introduction to microbiology		
2	Cellular Microbes: Structure and Function of Bacteria, Achaea and Eukarya		
3	Microbial Growth, Microbial Metabolism		
4	Introduction to Genetics		
COURSE'S CONTRIBUTION TO PROGRAM OUTCOMES (Blank : no contribution, I: Introduction, P: Profecient, A: Advanced)			
Program Learning Outcomes			Cont.
1	Evaluate clinical laboratory data by interpreting laboratory results and relating the data to various disease states.		A
2	apply principles of evidence-based medicine to determine clinical diagnoses.		A
3	apply the basic principles of gross and microscopic anatomy, physiology, biochemistry, immunology, microbiology/virology.		A
4	formulate and implement acceptable treatment modalities to various disease states.		A
5	use technology effectively in the delivery of instruction, assessment, and professional development.		A
6	exhibit essential employability qualities by demonstrating laboratory safety, analyzing laboratory results, and displaying professional conduct.		A
7	exhibit organizational skills, accountability, and ethical behavior.		A
8	apply skills needed in operating laboratory equipment for testing, assessing quality assurance for lab equipment, and adhering to standard safety practices in the laboratory environment.		A
9	apply problem-solving and decision-making skills.		A
10	apply and promote health policies and regulatory standards in the field career.		A
11	develop research in the field of medical analysis using qualitative and quantitative methods.		A
Prerequisites (Course Reading List and References):		Jawetz Melnick & Adelbergs Medical Microbiology	
Student's obligation (Special Requirements):		Attending 85% of classes and notes of the class	
Course Book/Textbook:		Charles, T., Dupont, C., Wessner,C. (2013). Microbiology. Hoboken, NJ: John Wiley & Sons.	
Other Course Materials/References:		Lectures, Practical Session, Assignments	
Teaching Methods (Forms of Teaching):		Lectures, Practical sessions, Presentation, , ,	
COURSE EVALUATION CRITERIA			
Method		Quantity	Percentage (%)
Attendance		1	5
Participation		1	5
Quiz		2	5
Homework		1	10
Midterm Exam		1	30
Final Exam		1	40
	Total		100
Examinations: True-False, Fill in the Blanks, Multiple Choices, Short Answers, Matching, , ,			
Extra Notes:			
ECTS (ALLOCATED BASED ON STUDENT) WORKLOAD			
Activities		Quantity	Workload Hours for 1 quantity*
			Total Workload

Theoretical Hours	16	2	32
Practical Hours	16	2	16
Final Exam	1	20	20
Attendance	1	5	5
Participation	1	5	5
Quiz	2	5	10
Homework	1	12	12
Midterm Exam	1		0
Total Workload			100
ECTS Credit (Total workload/25)			4

Peer review

Signature:

Name:

Lecturer

Signature:

Name:

Head of Department

Signature:

Name:

Dean