

Course Title: Medical Microbiology

Course Code: MICR 433

Program: Bachelor of science in Biology

**Department: Biology Department** 

College: College of Science

Institution: Jazan University

Version: T-104

Last Revision Date: Pick Revision Date.





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### A. General information about the course:

Со	urse Identificati	on			
1.	Credit hours:	2			
2.	Course type				
a.	University □	College □	Department⊠	Track□	Others□
b.	Required ⊠	Elective□			
	Level/year at wl ered: 10 <sup>TH</sup> /4 <sup>TH</sup> Y	nich this course 'EAR	is		
	Course general s course aims at giving	<b>Description</b> ng the student know	ledge in the fields o	f:	
- Ho	ost - parasite relation	nship.			
- Pa	thogenesis.				
- Ho	ost defense.				
- M	edically important b	acteria (characteristi	ics, diseases, diagno	osis and treatment).	
- Microbial flora and its relation to health and disease; General mechanisms of bacterial, viral and fungal pathogenesis; bacterial, chlamydial, rickettsial, and fungal infections that affect the major organ systems					
5.	Pre-requiremen	ts for this cours	e (if any): Micro	obial Physiology	334MIC
6. Co- requirements for this course (if any): None					
7. Course Main Objective(s): At the end of the course students will be able to: This course aims at giving the student knowledge in the fields:					
- Chemotherapy					
-	Host – parasite	relationship			

#### 1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	10	76.9%
2.	E-learning	1	7.7%
3.	<ul><li>Hybrid</li><li>Traditional classroom</li><li>E-learning</li></ul>	1	7.7%

Characteristics, antigenic structure, pathogenicity and diagnosis of gram positive bacteria

Characteristics, antigenic structure, pathogenicity and diagnosis of gram negative bacteria





No	Mode of Instruction	Contact Hours	Percentage
4.	Distance learning	1	7.7%

#### 2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	11
2.	Laboratory/Studio	11
3.	Field	-
4.	Tutorial	-
5.	Others (Self-study)	2
	Total	24

# B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Kno	wledge and und	erstanding	
1.1	Demonstrate significant knowledge in listing all characteristics, important features, steps of Medical Microbiology.	K1.3	Lectures	Quizzes, Short Answer Question (SAQ), MCQs
1.2	Demonstrate significant knowledge in a range of differentiating (Compare) between different mechanisms, functions, practices and aspects related to Medical Microbiology.	K2.1	Lectures	Direct questions
1.3	Demonstrate significant knowledge in drawing all systems, organs, cells and its contents, diagrams and figures of Medical Microbiology.	K2.3	Lectures, Lab work	Long or short answer questions, homework
2.0		Skills		
2.1	Examine theoretically or practically the slides, photos, diagrams or statements of Medical Microbiology.	S1.3	Lectures	Long or short answer questions



Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
2.2	Write a report about any practical or theoretical tasks related to Medical Microbiology.	S3.3	Lectures	Long or short answer questions
3.0	Values,	autonomy, and	responsibility	
3.1	Integrate prior knowledge of Medical Microbiology along with new knowledge in the profession for the sake of self-continuing professional development.	V1.2	Lectures	Short answer questions

### C. Course Content

No	List of Topics	Contact Hours
1.	Chemotherapy, factors affecting chemotherapy, Mechanism of action of chemotherapy, Microbial mechanisms of resistance.	1
2.	Host – Parasite relationship. Mechanism of pathogenesis and host resistance. Entry into host. Colonization and multiplication of pathogens. Resistance to host defenses. Damage to host tissues.	1
3.	General characteristics, antigenic structure, pathogenicity and laboratory diagnosis of Gram-positive bacteria.	4
4.	General characteristics, antigenic structure, pathogenicity and laboratory diagnosis of Gram-negative bacteria.	4
5.	Mycosis and Mycotoxicosis. Candidiasis. Type of candidiasis.	1
6.	Dermatophytosis Otomycosis and Penicillinosis (Self study)	-
	Total	11

### **D. Students Assessment Activities**

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Lecture Quizzes 1	3	5%
2.	Mid-term Theory exam	5	10%
3.	Practical Quiz exam	6	5%
4.	Homework assignment	8	5%
5	Practical assignment	9	5%
6	Final practical exam	11	20%
7	Final Exam	12	50

<sup>\*</sup>Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)





#### E. Learning Resources and Facilities

### 1. References and Learning Resources

Essential References	<ul> <li>Kayser et al (2005) Medical Microbiology, Published by</li> <li>Thiem Stuttgart, New York, USA</li> </ul>		
Supportive References	<ul> <li>- Wesley A. Volk (1994). Essentials of Medical Microbiology.</li> <li>Lippincott company, East Washington Square,</li> <li>Philadelphia, PA (1995)</li> </ul>		
Electronic Materials	<ul> <li>-https://www.microbiologyresearch.org/content/journal/jmm</li> <li>-https://www.journals.elsevier.com/indian-journal-of-medical-microbiology</li> </ul>		
Other Learning Materials			

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Traditional classrooms and E-learning
Technology equipment (projector, smart board, software)	(projector, smart board, software)
Other equipment (depending on the nature of the specialty)	NA

## F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students Course Coordinator	Direct (Questionnaire)
Effectiveness of students assessment	Peer Reviewer	Direct (Cross Check marking)
Quality of learning resources	Students Course Coordinator Quality Committee	Indirect
The extent to which CLOs have been achieved	Course Coordinator Quality Committee	Indirect
Other		

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)





## G. Specification Approval Data

COUNCIL /COMMITTEE	BIOLOGY DEPARTMENT BOARD
REFERENCE NO.	BIQ2214
DATE	20/9/2022AD

