Course Specifications

Course Title:	**General Microbiology and Immunology.**
Course Code:	**MAC 211**
Program:	**Bachelor of Dentistry [BDS]**
Department:	**Basic Science department.**
College:	**College of Dentistry**
Institution:	**Majmaah University**

Table of Contents

A. Course Identification

1. Credit hours: **3** (1+2+0)	

2. Course type

a.   University ☐   College ☐   Department **X**   Others ☐

b.   Required **X**   Elective ☐

3. Level/year at which this course is offered: **2nd Year / 1st Semester**

4. Pre-requisites for this course (if any): **NA**

5. Co-requisites for this course (if any):**NA**

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	15	50%
2	**Blended**	NA	NA
3	**E-learning**	NA	NA
4	**Correspondence**	NA	NA
5	**Other - Laboratory**	30	50%

7. Actual Learning Hours (based on academic semester)

No	Activity	Learning Hours
Contact Hours		
1	**Lecture**	**15**
2	**Laboratory/Studio**	**30**
3	**Tutorial**	**-**
4	**Others** (specify)	**-**
	Total	**45**
Other Learning Hours*		
1	**Study**	**35**
2	**Assignments**	**10**
3	**Library**	**10**
4	**Projects/Research Essays/Theses**	**-**
5	**Others** (specify)	**-**
	Total	**65**

* The length of time that a learner takes to complete learning activities that lead to achievement of course learning outcomes, such as study time, homework assignments, projects, preparing presentations, library times

B. Course Objectives and Learning Outcomes

1. Course Description
The course is designed for students preparing for programs in dental fields. The lecture entails the study of microorganisms, including their structure, metabolism, methods of multiplying, and classification. The laboratory portion of the course covers microscopic and cultural techniques for studying and identifying microorganisms.

2. Course Main Objective
1. Have a basic understanding of the major pathogenic organisms, related disease-syndromes and their modes of spread with particular reference to dentistry.   2. Have a basic understanding of the host-parasite relationship and the immune system.   3. Have a basic understanding of the oral microbial ecology and pathogenesis of dental caries and periodontal disease.   4. Be aware of the major clinical and biological factors to be taken into consideration for the appropriate use of anti-microbial therapy.   5. Be familiarized with some of the laboratory procedures including specimen collection and handling, requesting appropriate tests and interpretation of laboratory reports.

3. Course Learning Outcomes

	CLOs	Aligned PLOs
1	**Knowledge:**	
K3.13.1	Recall the principles underlying the basic taxonomy of viruses, bacteria, fungi, and parasites to; include structural variety, physiological and genetic aspects.	K3.13
2	**Skills :**	
S1.9.1 S2.4.1	Correlate causative agent (microorganism) and its mode of transmission. Summarized different laboratory diagnosis used in microbiology	S1.9 S2.4
3	**Competence:**	
C2.10.1	Demonstrate leadership skills and coordinate with fellow colleagues to submit a group task or assignment	C2.10

C. Course Content

No	List of Topics	Contact Hours
1	**1st Semester**	1
2	**Introduction to microbiology**	1
3	**General Bacteriology**	1
4	**General Bacteriology**	1
5	**General Bacteriology**	1
6	**General Virology**	1
7	**General Virology**	1
8	**General mycology**	1
9	**General mycology**	2
10	**General Parasitology**	1
11	**General Parasitology**	1
12	**Antibiotics & Chemotherapy II**	1
13	**General Immunology**	1
14	**Revision**	1

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1	**Knowledge**		
K1.1	Describe the principles underlying the basic taxonomy of viruses, bacteria, fungi, and parasites to; include structural variety, physiological and genetic aspects	Lectures, Practical lab	Recall/Factual Questions in Written exams , Oral evaluations, OSPE, Assignments
K1.2	Explain systemic implications of oral microbiology o include bacteremia and endocarditis infections in the compromised host.	Lectures, Practical lab	Recall/Factual Questions in Written exams , Oral evaluations, OSPE, Assignments
2	**Skills :**		
S1.1	Define a clinical problem and analyses a given clinical data	Lectures, Practical lab	Conceptual, Analytical or Evaluative questions in Written exams , Oral evaluations, OSPE, Assignments, weekly assessments
3	**Competence:**		
C2.1	Demonstrate leadership skills and coordinate with fellow colleagues	Students will be divided into small groups and tasks	The group task / Assignment will be supervised closely and the

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
	to submit a group task or assignment	will be assigned to the group	work done by each student will be evaluated using rubrics

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Quiz 1 + 2	Week 10 & Week 19	05%
2	Midyear exam – Theory	Week 14	25%
3	Behavior / Professionalism	During the course	05%
4	Assignment	During the course	10%
5	Weekly Assessment	During the course	15%
6	Final Practical Exam	Week 14	15%
7	Final Theory Exam	Week 16	25%

*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :
Students are supported academic guidance during office hours and provide them with guidance and advice, as well as scientific knowledge of students' problems and how to solve it.

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	✓ Human Anatomy & Physiology, Elaine N. Marieb and KatjaHoehn Pearson, Benjamin Cummings, 8th edition, 2010. ✓
Essential References Materials	✓ Essentials of Human Anatomy & Physiology, Elaine N. Marieb, Pearson, Benjamin Cummings, 10th edition, 2009.
Electronic Materials	None
Other Learning Materials	None

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	✓ Lecture room suitable for 30 students ✓ Fully equipped lab for practical sessions
Technology Resources (AV, data show, Smart Board, software, etc.)	✓ Projector ✓ Smart board with all the accessories ✓ Internet
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	✓ Microscopes ✓ Microscopic slides ✓ Soft tissues specimens and casts of oral structures

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of teaching and assessment	Students	✓ Course Evaluation Survey ✓ Quality of Exam Survey
	Faculty	✓ CLO Mapping with teaching & assessment. ✓ Course Blueprinting ✓ Grade Analysis ✓ Psychometric Analysis
	Peers	Grade Verification
Extent of achievement of course learning outcomes	Faculty member / Quality assurance committee	✓ Direct assessment outcome analysis ✓ Course report preparation
Quality of learning resources, etc	Students / Faculty	✓ Academic advising survey ✓ Student experience survey

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	**Department Council**
Reference No.	*******************
Date	***************