



Course Specifications

Course Title:	Bacteriology
Course Code:	231 MIC
Program:	Biology
Department:	Biology
College:	Science
Institution:	Jazan University

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A. Course Identification

1. Credit hours: 2Hours			
2. Course type			
a.	University <input type="checkbox"/>	College <input type="checkbox"/>	Department <input checked="" type="checkbox"/>
b.	Required <input checked="" type="checkbox"/>	Elective <input type="checkbox"/>	Others <input type="checkbox"/>
3. Level/year at which this course is offered: Two / Two			
4. Pre-requisites for this course (if any): None			
5. Co-requisites for this course (if any): None			

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	45	%52.94
2	Blended	20	%23.53
3	E-learning	10	%11.76
4	Distance learning	5	%5.88
5	Other	5	%5.88

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	Lecture	15
2	Laboratory/Studio	30
3	Tutorial	-
4	Others (specify)	-
	Total	45

B. Course Objectives and Learning Outcomes

1. Course Description		
2. Course Main Objective		
3. Course Learning Outcomes		
	CLOs	Aligned PLOs
1	Knowledge and Understanding	
1.1	Define all principals, concepts, theories and aspects concerning with bacteriology	K1.1
1.2	Compare between different mechanisms, functions, practices and aspects related to bacteriology	K2.1
1.3	Draw all systems, organs, cells and its contents diagrams and figures of bacteriology	K2.3

CLOs		Aligned PLOs
2	Skills :	
2.1	Debate the bacteriology theories, principles and processes.	S1.1
2.2	Write a report about any practical or theoretical tasks related to bacteriology	S3.3
3	Values:	
3.1	Illustrate awareness of risk assessment and safety observation when dealing with various equipment at various fields.	V2.1

C. Course Content

No	List of Topics	Contact Hours
1	Introduction/ Distribution of bacteria	1
2	Function of bacteria	1
3	Size and fundamental shapes of bacteria and Archaea.	1
4	Surface Structures-Appendages.	1
5	The Cell Envelope (<i>Gram +ve and Gram-ve bacteria</i>)	1
6	Importance of Surface Components	2
7	Cytoplasmic Constituents of bacteria	1
8	Cell division in bacteria-Binary fission – Sexual reproduction (Para sex)	1
9	Classic methods of Identification of Bacteria	1
10	Ecology of Bacteria- Bacterial Pathogenicity	1
11	General conditions for growth of bacteria	3
Total		

D. Teaching and Assessment

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

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	Knowledge and Understanding		
1.1	Define all principals, concepts, theories and aspects concerning with bacteriology	Lectures	Quizes, short answer questions.
1.2	Compare between different mechanisms, functions, practices and aspects related to bacteriology	Lectures	Quizes, short answer questions.
1.3	Draw all systems, organs, cells and its contents diagrams and figures of bacteriology	Lectures- Lab work	Short answer questions-Homework
2.0	Skills		
2.1	Debate the bacteriology theories, principles and processes.	Lectures- Lab work	Practical exam-Homework
2.2	Write a report about any practical or theoretical tasks related to bacteriology	Lectures Group Discussion Lab work	Practical exam-Homework
3.0	Values		
3.1	Illustrate awareness of risk assessment	Lab work	Practical exam-

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
	and safety observation when dealing with various equipment at various fields.		Homework

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Written assignment	3	5
2	Theoretical quiz	5	5
3	Mid-term exam	7	10
4	Practical Mid-term exam	9	10
5	Group assignment	11	5
6	Final practical exam	13	15
7	Final Exam	15	50
8			

*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 :
10 Office hours/faculty/week.

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	Ibrahim Youssef Trabelsi (2007): Agricultural microbiology, King Saud University
Essential References Materials	1. List Required Textbooks - Dubey, R. C., Maheshwari, D. K. (2005). A Textbook of Microbiology 7th edition . S. Chand and Company LTD, Ram Nagar , New Delhi -110055.
Electronic Materials	2. List Essential References Materials (Journals, Reports, etc.)
Other Learning Materials	3. List Electronic Materials, Web Sites, Facebook, Twitter, etc . Abdullah Saleh Al-Khalil and others (2008) Introduction to microbiology scientific publishing and printing presses - King Saud University

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	1 Lecture room(s) for groups of 50 students. 1 Laboratory for group of 25 students
Technology Resources (AV, data show, Smart Board, software, etc.)	Computer laboratories for groups of 25 students.
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	Light microscopes, glassware, chemicals, etc.

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods

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	
Reference No.	
Date	