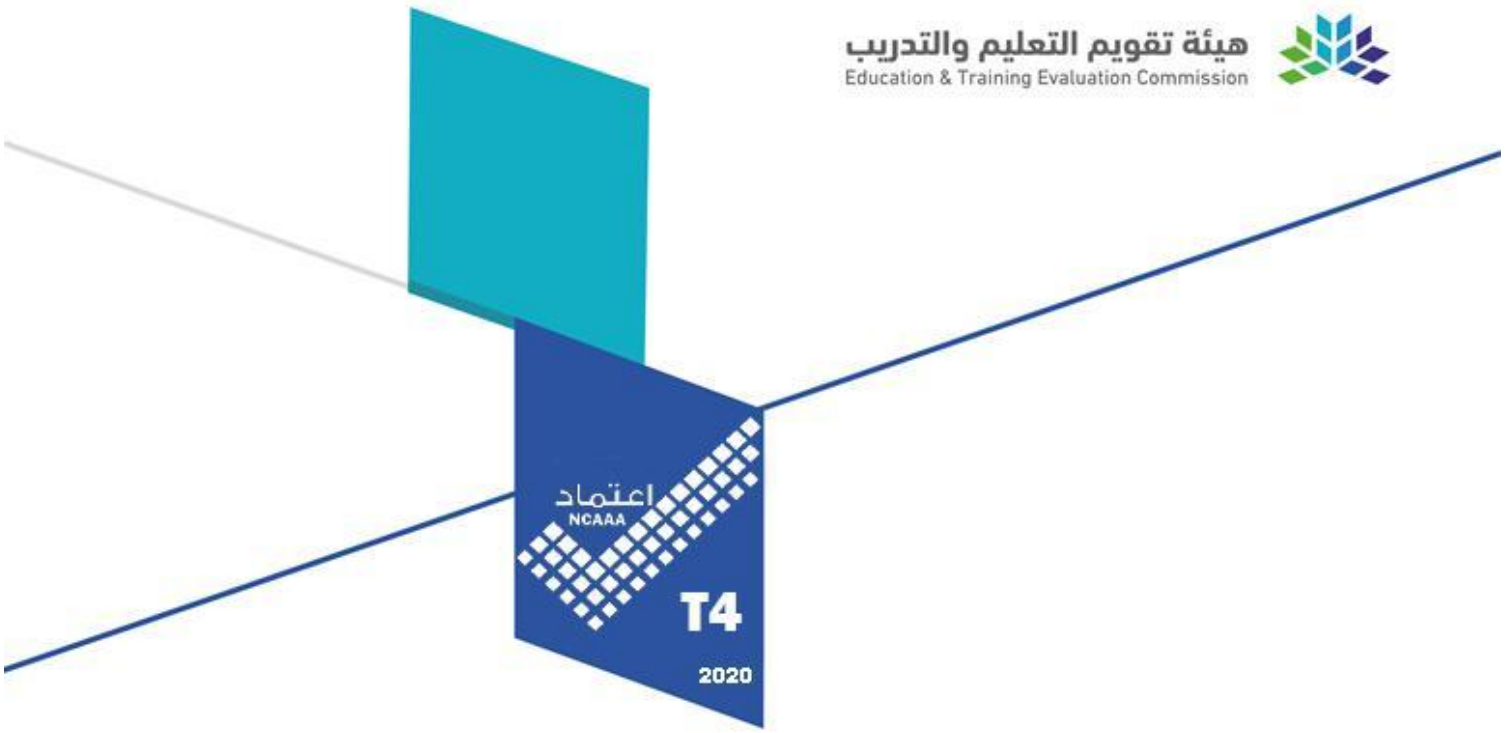
هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission



Course Specifications

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

Table of Contents

A. Course Identification

1. Credit hours: 2Hours
2. Course type **a.** University ☐ College ☐ Department β Others ☐ **b.** Required β Elective ☐
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
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 (*Gram +ve and Gram-ve bacteria***	**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.

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
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 and safety observation when dealing with various equipment at various fields.	Lab work	Practical exam-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	5
5	Group assignment	11	5
6	Final practical exam	13	20
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	