هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

2023
TP-153

Course Specification
(Bachelor)

Course Title:	**Public Health Microbiology and Parasitology**
Course Code:	**PHE26224**
Program:	**Bachelor of Sciences in Public Health**
Department:	**Public Health**
College:	**Applied Medical Sciences**
Institution:	**University of Bisha**
Version:	**1**
Last Revision Date:	**2**-8-2023

وزارة التعليم - جامعة بيشة
Ministry Of Education - University Of Bisha
وكالة الجامعة للشؤون التعليمية

Table of Contents

A. General information about the course:

1. Course Identification

1. Credit hours:					
2 (1+1)					
2. Course type					
A.	☐University	☐ College	☒ Department	☐Track	☐Others
B.	☒ Required		☐ Elective		
3. Level/year at which this course is offered: 4h level 2nd year					
4. Course general Description:					
Focuses on planning, monitoring and evaluation of Public Health programs or projects. Focuses on fundamental concepts and methods in general microbiology and Parasitology with emphasis on human health and infectious diseases.					
5. Pre-requirements for this course (if any)**:**					
NA					
6. Co-requirements for this course (if any)**:**					
NA					
7. Course Main Objective(s):					
1. **Explain fundamental concepts of microbiology and Parasitology and its application to human health.** 2. **Equip the students with skills in undertaking various microbiological analyses.**					

2. Teaching mode

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	13	28.9%
2	E-learning	2	4.4%
3	Tutorial		
4	Interactive learning		
5	Practical	30	66.7%

3. Contact Hours

No	Activity	Contact Hours
1.	Lectures	13
2.	E-learning	2

3.	Practical	30
4.	Interactive learning	
5.	Seminars	
6.	Self-Learning	30
Total		**75**

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	**Knowledge and understanding**			
1.1	Discuss the scopes, branches, history and applications of microbiology and Parasitology.	K4	Lecture-discussion	Written assessment
1.2	Discuss the physical, cultural and chemical characteristics as well as the taxonomy of various microorganisms.	K4	Lecture-discussion	Written assessment
1.3	Explain microbial growth and various methods of controlling the growth of microorganisms.	K4	Lecture-discussion	Written assessment
1.4	Discuss the role of microorganisms in human health and his environment.	K4	Lecture-discussion	Written assessment
2.0	**Skills**			
2.1	Perform microscopic examination and staining of microbial smears.	S4	Laboratory Demonstration and Activity	Practical Examination
2.2	Cultivate microbial cultures from a variety of sources.	S4		
2.3	Apply appropriate methods of controlling microbial growth in undertaking microbiological analyses.	S4		
3.0	**Values, autonomy, and responsibility**			
3.1	Make decisions based on evidence and sound arguments while upholding personal integrity, professionalism, and ethical principles.	V1	Lecture-discussion Laboratory Activity	In class- lab evaluation

C. Course Content

No	List of Topics (Theory)	Contact Hours
1.	Overview of Microbiology and Parasitology Laboratory: Good Microbiological Laboratory Practices	3
2.	Cell Structure and Taxonomy Laboratory: Microscopy	3
3.	Microbial Diversity: Acellular and Prokaryotic Microbes Eukaryotic Microbes Laboratory: Simple and Differential Staining Procedures	15
4.	Microbial Physiology and Genetics Laboratory: Preparation Microbiological Culture Media	3
5.	Controlling of Microbial Growth In Vitro and In Vivo Laboratory: Control of Microbial Growth	6
6.	Microbial Ecology Laboratory: Bacteriological Analysis of Water	3
7.	Pathogenesis and Host Defense Mechanisms Laboratory: Isolation of Pure Culture	3
8.	Major Infectious Diseases of Humans Laboratory: Fungi	9
Total		**30**

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Quiz 1	3rd	5%
2.	E Learning activities	4, 6, 10th	15%
3.	Mid-Term Examination	8th	20%
4.	Project/ seminar	11th	10%
5.	Final Examination practical	End of semester	20%
6.	Final Examination theory	End of semester	30%
	Total		**100%**

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Engelkirk, Paul G. and Janet Duben-Engelkirk (2015). **Burton's Microbiology for the Health Sciences.** 10th Edition. Wolters Kluwer Health, Philadelphia. ISBN: 978-1-4511-8632-1
Supportive References	Cappuccino, James. G. and Natalie Sherman (2014). **Microbiology: A Laboratory Manual.** 10th Edition. Pearson, Boston ISBN: 978-0-321-84022-6 Leboffe, Michael J. and Burton E. Pierce (2011**). A Photographic Atlas for the Microbiology Laboratory**. 4th Edition. Morton Publishing Company, Colorado. ISBN: 978-0-89582-872-9
Electronic Materials	Chortle.ccsu.edu/java5/cs151java.html Google, Altavista, Medline.
Other Learning Materials	Digital library, at university of Bisha

2. Required Facilities and equipment

Items	Resources
facilities	Middle size classroom well-equipped laboratory
Technology equipment	Multimedia projector Smart board
Other equipment	1. Samples of parasites (prepared teaching slides) 2. Compound microscope 3. Dissecting microscope **4.** Parasitological requirements

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students, Faculty, Quality committee	Direct / indirect - Using well-structured questionnaire
Effectiveness of student's assessment	Faculty members Peer Reviewer	Direct / indirect - Continuous reviewing and course portfolio
Quality of learning resources	Faculty members Curriculum committee	Direct / indirect - Annual review course report
The extent to which CLOs have been achieved	Course coordinator	Direct / indirect

G. Specification Approval

COUNCIL /COMMITTEE	**PH DEPARTMENT BOARD**
REFERENCE NO.	
DATE	