Course Specification
(Bachelor)

Course Title:	General Biology
Course Code:	BIO26221
Program:	Bachelor of Science in Biology
Department:	Biology
College:	Science
Institution:	University of Bisha
Version:	2
Last Revision Date:	5 September 2023

Table of Contents

A. General information about the course:

1. Course Identification

1. Credit hours: (3)					
2 Theory + 1 Lab					
2. Course type					
A.	☐University	☐College	☒ Department	☐Track	☐Others
B.	☒ Required		☐Elective		
3. Level/year at which this course is offered: (4th level 2nd year)					
4. Course general Description:					
The course includes a study of the nature of living matter and different types of living organisms, with a study of the foundations of plant and animal physiology.					
5. Pre-requirements for this course (if any)**:**					
None					
6. Co-requirements for this course (if any)**:**					
None					
7. Course Main Objective(s):					
The main purpose of the course is giving principles, basic concepts and knowledge in Botany, Zoology, and Microbiology branches. As well as give practical skills to prepare students for further studies in different and various biological branches.					

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	4	100%
2	E-learning		
3	Hybrid • Traditional classroom • E-learning		
4	Distance learning		

3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	**Lectures**	30
2.	**Laboratory/Studio**	30
3.	**Field**	
4.	**Tutorial**	
5.	**Others (specify)**	
Total		60

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	Outline the role and functions of organic and inorganic compounds in the cell, and the structure and function of cell organelles.	K3	Lectures and Laboratories	Mid and final exams. Quizzes.
1.2	Define Algae, Viruses, Bacteria and Archegoniate, plant and animal kingdom and plant classification.	K2		
1.3	Identify animal and plant histology.	K3		
1.4	Define Animal Physiology, Heredity, Plant physiology, and Ecology.	K4		
2.0	**Skills**			
2.1	Distinguish between prokaryotic and eukaryotic cells and the normal compositions of both animal and plant tissues.	S2	Lectures and Laboratories	Mid and final exams. Quizzes, and Homework
2.2	Recognize structure and function of cellular organelles, and the chemical composition of protoplasm	S1		
2.3	Differentiate between the different biological branches, and their surrounding environment in one of the research methods.	S3		
3.0	**Values, autonomy, and responsibility**			
3.1	Interact actively independently and in group	V3	Group discussion, presentation	Participation and discussion

C. Course Content

No	List of Topics	Contact Hours
1.	Introduction to the course -Chemistry of life 1. Chemical structure of protoplasm. 2. Role and functions of organic and inorganic compounds in the cell. 3. Carbohydrates, Proteins and Lipids. Nucleic acids -Enzymes and water relations Lab 1: Introduction to the course. Introduction to the light microscope, its composition and uses.	4 4
2.	Cell structure of 1. Prokaryotes (Bacteria, virus, and Fungi) Lab 2: Demonstration to Prokaryotes and its Cellular organelles.	2 2
3.	Cell structure of Eukaryotes (Plant, Animals) Lab 3: Demonstration to Eukaryotes and its Cellular organelles	2 2
4.	Principle and concepts of Genetic Cell division 1. Mitosis. 2. Meiosis. Lab 4: Application to Mendelian inheritance. Demonstration of Cell division.	4 4
5.	Principles of Ecology and Biodiversity (plant kingdom and animal kingdom. Lab 5: Principle of Ecology and the most famous and widespread plants and animals of the Kingdom of Saudi Arabia	4 4
6.	Animal tissues Lab 6: Animal histology	4 4
7.	Plant tissues Lab 7: Plant tissues	4 4
8.	Animal physiology (digestive and circulatory systems) Lab 9: Animal physiology (digestive and circulatory systems)	4 4
9.	Endocrine system Lab 10: Revision and practical Final Exam	2 2
Total		60

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Theory Quiz	4	5%
2.	1st Mid Exam	7	10%
3.	Practical Assignment	10	5%
4.	2nd Mid Exam	11	10%
5.	Group Presentation or Homework	13	5%
6.	Practical Final Exam	15	15%
7.	Final Exam	16	50%

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Chiras, Daniel D. (2008). Human Biology. Jones and Bartlett Publishers. ISBN 0763753689780763753689. pp 496. Sylvia Madder (2013). Human Biology, M.C. Grew Hill Publishers. Member's Structure and Function, Barbara Janson Cohen &Jason Taylor (2005).
Supportive References	
Electronic Materials	https://en.wikibooks.org/wiki/General_Biology/Getting_Started/I introduction https://open.umn.edu/opentextbooks/textbooks/biology-2e. Biology Botany, Dr. Mrs. RENU EDWIN, and others –Chennai – 2006. https://www.pdfdrive.com/biology-botany-textbooks-onlined8895584.html
Other Learning Materials	Other learning material such as computer-based programs/CD, professional standards or regulations and software. None

2. Required Facilities and equipment

Items	Resources
facilities	Lecture rooms are available to accommodate 30 students. Laboratories are available to accommodate 25 students
Technology equipment	Computer access with available data show, smart board, and internet in the department.
Other equipment	Microscopes Microscopic slides Stained with different types of stains to differentiate tissues. Laboratory equipment.

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Teacher / Students	Direct / indirect
Effectiveness of Students assessment	Teacher / Students	Direct / indirect
Quality of learning resources	Academic Committee, Teacher	Direct / indirect
The extent to which CLOs have been achieved	Academic Committee, Teacher	Direct / indirect
Other		

G. Specification Approval

COUNCIL /COMMITTEE	College of Science Council
REFERENCE NO.	**1**
DATE	5 September 2023