Course Specification
Student Version

Course Title:	Biology
Course Code:	BIOL 101
Department:	Common Sciences
Program:	Bachelor of Dental Surgery
College:	Vision College in Riyadh
Institution:	Vision College in Riyadh
Revised:	July 2025

A. Course Identification

1. Credit hours: 3 (2+1+0)
2. Level/year at which this course is offered: Level 2/Year 1
3. Pre-requisites for this course (if any): None
4. Co-requisites for this course (if any): Biochemistry

B. Teaching Methods

1	Lecture
2	Practical Session
3	Seminar / Presentation

C. Course Description and Main objective

1. Course Description

This course gives the students a better understanding of living things and teaches more about their own body. It consists of theoretical and practical parts.
The first part is in the form of lectures about different cellular topics, and the second part. include examination of all human tissues under microscope.

2. Main course Objective

The main objective of this course is to provide students a general knowledge of the basic principles of cell biology and tell them how things in the world work such as photosynthesis, cellular respiration, cell division, etc.

3. Course Objectives

By the end of this course, students should be able to:

- Explain normal structure and function of the body in relation to its organ systems.
- Recognize the cell and its types in addition to the subcellular organelles and describe their function.
- Describe the cellular respiration process.
- Explain roles of enzymes and difference between anabolic and catabolic reaction.
- Differentiate between mitosis and meiosis.
- Practice evidence based criteria to differentiate between different types of tissues.
- Practice teamwork and professional collaboration.

D. Course Content

No.	List of Topics
Theoretical Lectures	
1	The cell (types, organelles structure and function) Part 1
2	The cell (types, organelles structure and function) Part 2
3	Cell Membrane
4	Biological Macromolecules and Lipids
5	Biological Macromolecules and Lipids (Proteins)
6	An introduction to metabolism (Enzymes)
7	Cell Respiration (The Principles of Energy Harvest)
8	Cell Respiration (The process of cellular respiration)
9	The Cell cycle & Mitotic Division
10	Meiosis and Sexual Life Cycles
11	The chromosomal basis of inheritance Part 1
12	Chromosomal basis of inheritance Part 2
13	Mendel and The Gene Idea
14	Body Systems
Practical Sessions	
1	The microscope and its use.
2	Types of Bacteria
3	Plant Cell (Onion Cell)
4	Epithelial Tissues
5	Connective Tissues
6	Vascular Tissues
7	Nervous Tissues
8	Muscular Tissues
9	Cell division
10	Histological structure of the Small Intestine
11	Histological structure of the Liver
12	Histological structure of the Kidney
13	Revision

E. Assessment tools

#	Assessment task	Time	Percentage of Total Assessment Score
1	Seminar / PowerPoint Presentation	During the Semester	10 %
2	Quizzes (Short notes and MCQs)	First Quiz & Second Quiz	10 % (each 5)
3	Midterm Exam	WEEK 7-8	20%
4	Practical exam	Week 14-15	20%
5	Final Written exam	End of the semester	40%
	Total		**100%**

F. Learning Resources

Required Textbooks	Campbell, N.A and Reece, J.B. (2019): Biology, 15th ed.
Essential Reference Material	Raven, Peter, George et al., Biology (Hardcover), 8 Edition, 2020
Electronic Material	//