Course Description Template for the subject | Medical biology

University/College Name	Al-Ayen University, Iraq / College of Medicine
Subject Name	Medical biology
Academic Stage	First Stage
Available Attendance Modes	Lecture and Discussion
Subject System	Yearly
Academic Year for Preparing this Description"	2023-2022

The week	The title	Lecture objective
1st week	Introduction ofBiology	To understanding of • Sciences of Biology. • Types of the organisms. • Kingdoms of life.
2nd week	Types of cells	To understanding of • unicellular organisms • multicellular organisms • differentiation between them • Protoplasm • Physical, chemical and nature properties
3rd week	Tools of cellbiology	To understanding of • Microscope • Types of microscope.
4th week	Composition ofThe cell	To understanding of • The cytoplasm. • Endoplasmic reticulum. • Golgi apparatus. • Ribosomes
5th week	Composition ofThe cell	To understanding of • Lysosomes • Peroxisomes. • Mitochondria • Vacuoles. • Centrosome. • Cilia and flagella. • Non- living inclusion bodies.

6th week	Cell structure	To understanding of • The Nucleus. • Nuclear envelope. • Nucleoplasm. • Nucleolus.
7th week	Cell structure	To understanding of • Cytoskeleton • Intermediate filaments. • Microtubules. • Microfilaments.
8th week	Plasma membrane	To understanding of •Structure and function •Membrane lipids. •Membrane protein diversity.
9th week	How molecules cross the plasmamembrane	To understanding of •Passive ways. •diffusion. •Osmosis. •Facilitated transport.
10th week	How molecules cross the plasmamembrane	To understanding of •Active transport. •Extracellular matrix. •Types of junctions.
11th week	Cell division	To understanding of •Chromosome Composition. • Cell cycle. • Mitosis. • Mitosis phases.
12th week	Meiosis	To understanding of •Meiosis. • Mitosis phases • Antigenic Structure. •Gametogenesis. •spermatogenesis. •Oogenesis.