

**University of Al-Anbar**  
**College of Pharmacy**  
**Department of Clinical Laboratory Sciences**

Title of the course: *Practical Human Biology*

Level: 1<sup>st</sup> Class, 1<sup>st</sup> Semester

Credit hours: **Laboratory 1 credit 2 hours/week**

Tutors:

Reference text: *Lab Manual for Practical Human Biology Adopted by the Department*

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**Objectives:** Study the human body composition, types of cell structures, types of tissues, bone, skeleton, joints and muscle as well as the nutrition. Human biology also explains in details the different body systems and human genetics.

At the end of the course the student should be able to describe the human body composition, body systems structure and function, and human genetics such as the Mendelian inheritance, division of chromosomes, and terms such as allele, locus, homo and heterozygous.

No	Lab title	hours
1.	The light microscope.	2
2.	The cells: Examination of cells using light microscope.	2
3.	The tissues: Epithelial tissues (simple epithelial tissue).	2
4.	The tissues: Epithelial tissue (simple epithelial tissue).	2
5.	Connective tissue.	2
6.	Muscular tissue: Differentiation between different types of muscles.	2
7.	Nervous tissue.	2
8.	Bone and cartilage.	2
9.	Digestive system (Digestion).	2
10.	Digestive system: Small and large intestine.	2
11.	Blood and blood cells.	2
12.	Cell Division (Mitosis).	2
13.	Cell Division (Meiosis).	2
14.	The Chromosomes: Shape and helical structure.	2
15.	Excretory system.	2