



Ministry of Higher Education
and Scientific Research
Warith Al-Anbiyaa University
Department of Anatomy

Course Description Guide

Human Biology



2024

Course Description Form

1. Course Name:	
Human biology	
2. Course Code:	
Medu 108	
3. Semester / Year:	
First semester	
4. Description Preparation Date:	
28/4/2024	
5. Available Attendance Forms:	
attendance	
6. Number of Credit Hours (Total) / Number of Units (Total)	
<p style="margin-left: 40px;">Number of theory hours 150</p> <p style="margin-left: 40px;">Number of practical hours 60</p> <p style="margin-left: 40px;">Number of units 12</p>	
7. Course administrator's name (mention all, if more than one name)	
<p>Name: sarah khudhair obayes email :sarahkhudhairobayes@gmail.com</p> <p>Talib jawad email: talibjwd@yahoo.com</p>	
8. Course Objectives	
<p>Course Objectives</p> <p>1. Course objectives</p> <p>1. Objectives:</p> <p>2. A) Understand the terms used in medical biology</p> <p>3. B) A brief description of the bodily systems that make up the body.</p> <p>4. c) Basic concept of body components using different imaging techniques.</p> <p>5. Ethics and behavior in the medical biology laboratory.</p> <p>6. D) Basic review for various types of subject exams.</p> <p>7. f) A guide to biology learning resources including print, multimedia and online</p> <p>.</p>	
9. Teaching and Learning Strategies	
Strategy	. Teaching and learning strategies

9. The main strategy to be adopted in delivering this unit is to encourage students' participation in the study and learning process, while at the same time improving and expanding their critical thinking skills. This will be achieved through interactive classroom and tutorials and through consideration of some seminars by the students themselves and short presentations of some anatomy topics to show their experiences and upcoming activities of interest to the students

10. Course Structure

Exploring Life and Science

- 1 hour 1. The Characteristics of Life
- 1 hour 2. Humans Are Related to Other Animals
- 1 hour 3. Science as a Process
- 1 hour 4. Making Sense of a Scientific Study
- 1 hour 5. Science and Social Responsibility
- 2 hours Laboratory

Understanding the development of medical science

Week 2 Chemistry of Life

- 1 hour 1. From Atoms to Molecules
- 1hour 2. Water and Living Things
- 1 hour 3. Molecules of Life
- 1hour 4. Carbohydrates
- 1 hour 5. Lipids
- 2 hours Laboratory

Biological samples (blood, urine)

Week 3 1hour 6. Proteins

- 1 hour 7. Nucleic Acids

Cell Structure and Function

- 1hour 1. What Is a Cell?
- 2hour 2. How Cells Are Organized

2 hours Laboratory

Determination of carbohydrates ,lipids and proteins in biological samples (simple demonstration)

–Instruments required

–Clinical relevance

Week4 Cell Structure and Function

2 hour 3.The Plasma Membrane and How Substances Cross It

1 hour 4.The Nucleus and Endomembrane System

1 hour 5.The Cytoskeleton, Cell Movement, and Cell Junctions

1 hour 6.Mitochondria and Cellular Metabolism

2 hours Laboratory

Use of light microscope

Organization and Regulation of Body Systems Week5

2 hour 1.Types of Tissues

1 hour 2.Connective Tissue Connects and Supports

1 hour 3.Muscular Tissue Moves the Body

1 hour 4.Nervous Tissue Communicates

2 hours Laboratory

Identify basic cell structure (slides)

Identify cell movement(videos)

Week 6 Organization and Regulation of Body Systems

1 hour 5.Epithelial Tissue Protects

1 hour 6.Integumentary System

1 hour 7.Organ Systems, Body Cavities, and Body Membranes

2 hour 8.Homeostasis

2 hours Laboratory

Identify the different types of tissues (slides ,videos)

Week 7 Cardiovascular System: Heart and Blood Vessels

1 hour 1.Overview of the Cardiovascular System

1 hour 2.The Types of Blood Vessels

1 hour 3.The Heart Is a Double Pump

1 hour 4.Features of the Cardiovascular System

1 hour 5.Two Cardiovascular Pathways

2 hours Laboratory

-Understanding the basic anatomy of C.V.S

-Identify the histology of blood vessels

Week 8 1 hour 6.Exchange at the Capillaries

1 hour 7.Cardiovascular Disorders

Cardiovascular System: Blood

1 hour 1.Blood

1 hour 2.Red Blood Cells and Transport of Oxygen

1 hour 3.White Blood Cells and Defense Against Disease

2 hours Laboratory

-Identification of major blood components

Week 9 1 hour 4.Platelets and Blood Clotting

1 hour 5.Blood Typing and Transfusions

1 hour 6.Homeostasis

Lymphatic System and Immunity

1 hour 1.Microbes, Pathogens, and You

1 hour 2.The Lymphatic System

2 hours Laboratory

-Determination of CBC

Week 10	Lymphatic System and Immunity
1 hour	3.Innate Defenses
1 hour	4.Acquired Defenses
1 hour	5.Acquired Immunity
2 hour	6.Hypersensitivity Reactions
2 hours	Physics laboratory

-Basics of ELISA

-Agglutination test

Week 11	Infectious Diseases Supplement
2 hours	1.AIDS and Other Pandemics (Epidemiology)
1 hour	1.AIDS and Other Pandemics (Epidemiology)
1 hour	2.Emerging Diseases
1 hour	3.Antibiotic Resistance
2 hours	Laboratory

Infectious Diseases Supplement

Week 12	Digestive System and Nutrition
1 hour	1.Overview of Digestion
1 hour	2.First Part of the Digestive Tract
1 hour	3.The Stomach and Small Intestine
1 hour	4.The Accessory Organs and Regulation of Secretions
1 hour	5.The Large Intestine and Defecation
2 hours	Physics laboratory

-Basic anatomy of G.I.T

Week 13	2 hours	6.Nutrition and Weight Control
Respiratory System		
1 hour		1.The Respiratory System
1 hour		2.The Upper Respiratory Tract
1 hour		3.The Lower Respiratory Tract

2 hours Physics laboratory

-Videos of vitamins deficiency

Week 14 1 hour 4.Mechanism of Breathing

1 hour 5.Control of Ventilation

1 hour 6.Gas Exchanges in the Body

2 hour 7.Respiration and Health

2 hours Physics laboratory

Basic anatomy and physiology of respiratory system

11. Course Evaluation

) Theoretical lectures

2) Learning based on solving the problem (pathological condition)

3) Applied scientific laboratories

4) Discussions

5) Interactive learning such as brainstorming

6) Watch explanatory pictures and videos

Evaluation methods:-

1) Interim formative tests at the end of each week to obtain nutrition

Immediate feedback to measure the student's progress in learning.

2) The final or post-test (summative assessment) at the end of the study unit

3) Practical exam (OSPE)

4) Comprehensive test at the end of the year

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, oral, monthly, or written exams, reports etc

12. Learning and Teaching Resources

Required textbo (curricular books, any)	sylvia S.mander Michael - windelspesht HUMANE BIOLOGY
Main referen (sources)	sylvia S.mander Michael - windelspesht HUMANE BIOLOGY
Recommended books and references (scientific journals, reports...)	https://wwnorton.com/books/9780393884821
Electronic Referenc Websites	https://www.google.iq/books/edition/Human_Biology/lGJlAQAA-CAA