

**A COURSE MODULE DESCRIPTOR FORM**

Module Information			
<b>Course Module Title</b>	Human physiology and anatomy		
ناوی كۆرس مۆدیۆل	فیزیۆلۆجیا و علم التشریح		
عنوان الوحدة	تویكاری و كار ئه‌ندام زانی		
<b>Course Module Type</b>	Core	<b>Module Code</b>	ML 202
<b>ECTSs</b>	7		
<b>Department</b>	Medical laboratory technician		
<b>Department Code</b>	ML		
<b>Module Website (CMW)</b>	www.nobleinstitute.krd		
<b>Module Leader (ML)</b>	Dr. Rabar Mohammed Hussein		
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Relation with Other Modules	
Pre-requisites	N/A
Module Aims, Learning Outcomes and Indicative Contents	
Module Introductory Description	Introductory course in human anatomy and physiology, including the study of structure and function of cells, tissue and the integumentary, muscular and nervous systems .introduce common human disease processes .Laboratory component includes anatomical studies using microscopy and dissection and the study of physiological studies using microscopy and dissection and the study of physiological concepts via experimentation...
Module Aims	The objective of this course is to offer an in-depth presentation of the function of the major organs and organ system of the human body. the course is designed to expand physiological concept present in prerequisite courses .It is expected that the student understand the unique role of each organ and organ system in maintain health students should be able to describe the function of the distinctive cells that comprise each major organ and when appropriate define the role of physiological functional unit .case studies will be provided to enhance the integration of material presented in class
Module Learning Outcome	<p><b>The students will learn:</b></p> <ul style="list-style-type: none"> <li>-An Introduction to human body</li> <li>- Important information about normal function of major organs ex/ normal function Digestive system.</li> <li>- Pharmacological terms related to Digestive system</li> <li>-Structural Organization of the human body</li> <li>- Transport process</li> <li>-Factors related to the body</li> <li>-Blood compositions</li> <li>-Pharmacological terms related to Blood system</li> </ul>



# NOBLE TECHNICAL INSTITUTE

Ministry of Higher Education and  
Scientific Research  
Kurdistan Region – Iraq



Fall Semester

**Academic Year 2022 – 2023**

1<sup>st</sup> semester First graders

	<ul style="list-style-type: none"> <li>-components of the Human heart</li> <li>-Microscope Technique</li> <li>-Blood collection</li> <li>-Blood pressure</li> <li>-bleeding time and clotting time</li> </ul> <p>Also the relation between them and compare them with the abnormal laboratory test .</p>
<b>Learning and Teaching Strategies</b>	
<b>Strategies</b>	<p>We have theory ,practical</p> <p>General advice: <b>1-keep up with material.</b> It is essential that you study the material within a reasonable period of time after lecture/lab .<b>2-Ask question.</b> regardless of whether you are in lecture or lab, it is essential that you ask question if you don't understand a concept.<b>3-Read the book .</b>Make sure you read the appropriate chapter (s) before my lecture on a given topic .the description, tables, figure and diagram of concepts in the book will be most helpful in helping you learn the material. <b>You have got 3 hours for lab.....use your time wisely .</b> Although not every lab session will go with full 3 hours .it is wise use the remaining time to do brush up on material that was covered during previous labs. Lab exams will cover a lot of material, so it is important that you fully utilize lab time whenever available to you.</p>

<b>Required texts and References</b>	
<p>1 General Physiology Human anatomy General zoology</p>	

Textbook of Medical Physiology,  
by: A C Guyton and J E Hall.  
2. Tortora & Derrickson- Principles of  
Anatomy and Physiology.  
3. Review of Medical Physiology,  
by: W F Ganong

Module Delivery	
Total workload	
Contact Theoretical Hours – Per semester	1 hours per week
Contact Practical Hours – Per Semester	2 hours per week

Module Assessment			
Module Activities	Time /Number	Weight (Marks)	Week Due
- Contact hours - Participation (Science / Lab)	1	5%	Weekly
- (Social science / Critical thinking)	1	5%	Weekly
- Presentation / Seminar	1	5%	4
- Tutorial	1	5%	Weekly
- Quiz	1	5%	5
- Self-study	1	5%	5
- Projects	1	5%	7
- Oral assessment	1	5%	8
- Midterm Exam	1	20%	6
- Final Exam	1	40%	15
- <b>Total</b>	1	100%	

Total		100%		
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Delivery Plan (Designed Syllabus)	
	Course Module Content
Week 1	Student Origination
Week 2	<p><b>Introduction to Human physiology and anatomy</b></p> <ul style="list-style-type: none"> <li>-An Introduction to human body</li> <li>-Definition of human physiology and anatomy</li> <li>-sub Division of physiology</li> <li>-Body system</li> </ul> <p><b>Microscope Techniques</b></p> <ul style="list-style-type: none"> <li>-Types of microscope</li> <li>-characters of microscope and prepare slide</li> </ul>
Week 3	<p><b>Digestive system</b></p> <ul style="list-style-type: none"> <li>-process of digestion and roles</li> <li>-Types of Digestions</li> <li>-Functions of the digestive system</li> <li>-Pharmacological terms and Video</li> </ul> <p><b>Blood smear ( practical)</b></p> <ul style="list-style-type: none"> <li>- uses of Blood smear</li> <li>-prepare Blood smear</li> </ul>
Week 4	<p><b>Cell structure and functions</b></p> <ul style="list-style-type: none"> <li>-Structural Organization of the human body</li> <li>-Definition of cell</li> <li>-Development of cell theory</li> <li>-Major parts of cell and types of cell</li> <li>-Cytoplasm organelles and Video</li> </ul> <p><b>Blood Pressure (Practical)</b></p> <ul style="list-style-type: none"> <li>-what is pressure and factors affection on blood pressure</li> <li>-normal blood pressure</li> <li>- How to measure Blood pressure and Video</li> </ul>

Week 5	<p><b>Membrane transport</b></p> <ul style="list-style-type: none"> <li>-Transport process (Active and Passive )</li> <li>-Diffusion and Osmosis</li> <li>-Absorption of the drug</li> <li>-Factors affection the absorption of drug</li> <li>-Factors related to the body Video</li> </ul> <p><b>Phlebotomy ( practical)</b></p> <p>Blood collection Procedure</p> <ul style="list-style-type: none"> <li>-video</li> </ul>
Week 6	<p><b>Blood system</b></p> <ul style="list-style-type: none"> <li>-What is blood and functions</li> <li>-Blood compositions</li> <li>-Blood types</li> <li>-Pharmacological terms</li> </ul> <p><b>Determination of Hematocrit (Practical)</b></p> <ul style="list-style-type: none"> <li>-what is PCV.</li> <li>- Normal rang (PCV)</li> <li>-Blood collection Procedure -video</li> </ul>
Week 7	Seminar
Week 8	Midterm exam
Week 9	<p><b>Cardiovascular system</b></p> <ul style="list-style-type: none"> <li>-Components</li> <li>-What is human heart</li> <li>-Functions of the components</li> <li>-Video</li> </ul> <p><b>Bleeding time and clotting time (Practical)</b></p> <ul style="list-style-type: none"> <li>- mechanism of Bleeding and clotting</li> <li>-factors affect on bleeding time and clotting</li> <li>-Video</li> </ul>
Week 10	<p><b>Body plane</b></p> <ul style="list-style-type: none"> <li>-Direction of body</li> <li>-Body movements</li> </ul>

	<p><b>Body mass Index (Practical)</b> -Obesity -Factors that effect on BMI</p>
Week 11	<p><b>Skull, superficial and deep surfaces of the skull</b> -Upper and lower parts -Fractures <b>Human skeleton (Practical)</b> -upper limb, clavicle , scapula, hummers</p>
Week 12	<p><b>Central Nervous System (CNS)</b> Brain, cerebral, cerebellum, brain steam and spinal cord. <b>Muscle of the upper part and lower parts (Practical)</b></p>
Week 13	Oral exam
Week 14	Report and Review
Week 15	Final exam

**Course Keywords**

**Mechanisms of body system, Physiology, Animal physiology, Human physiology.**