

Kurdistan Region Government Ministry of Higher Education and Scientific Research Erbil Polytechnic University



# Module (Course Syllabus) Catalogue

### 2023-2024

College/ Institute	Shaqlawa Techni	cal College	
Department	Medical Laboratory Technology-		
Module Name	human Physiology		
Module Code	НРН603		
Degree	Technical Diploma Bachelor		
	High Diploma	Master	PhD
Semester	sixth		
Qualification	Bachelor		
Scientific Title	Lecturer		
ECTS (Credits)	5		
Module type	Prerequisite Core Assist.		Assist.
Weekly hours	4		
Weekly hours (Theory)	(2)hr Class (70)Total hrs Work		nrs Workload
Weekly hours (Practical)	(2)hr Class (70)Total hrs Work		nrs Workload
Number of Weeks	14		
Number of WeeksLecturer (Theory)	14 Dr. Duha Qais Kam	nil	
Lecturer (Theory)	Dr. Duha Qais Kar		
Lecturer (Theory) E-Mail & Mobile NO.	Dr. Duha Qais Kar		

# **Course Book**

<b>Course Description</b>	This course provides students with an understanding the human body anatomy and basic physical and chemical principles that underline physiological processes Several biological systems are considered, including respiratory, circulatory digestive and metabolic, thermoregulatory, osmosis regulatory, renal, nervous musculoskeletal, neural, hormonal, and sensory. The weekly laboratory session wil complement the lecture, mainly by providing hands-on experience in observation data collection, measurement, and problem-solving skills				
Course objectives	The purpose of taking this course is to learn the basic concepts and principles of body anatomy & physiology. Most of the lecture examples will be drawn from mammals, especially humans. This is because our understanding of the function of mammalian systems is better than it is for almost any other animal species. However, there are situations in which presentation of non-mammalian systems will enhance our understanding of anatomy and physiology in general.				
Student's obligation	basis stude any i 2- Lat 3- Ele class 4-Tall disru	covered, mention get a classmate's in this course if y stendance: students a, as participation is ent opportunity to information during eness: Lateness to co ectronic devices: Al and put away dur sing: During class p ptive to your fellor	ture is expected. and, discussed and notes as my notes you do not come to are strongly end is important to ask questions. So g the class whice class is disruptive l cell phones ar ring the entire of please refrain fr w students and so	l displayed s will not be to class. couraged t understand Students an ch provide e e to be tur class. com side c your profes	rned off at the beginning of onversations. These can be ssor
Required Learning Materials	<ul><li>Printouts of weekly lectures taught at the college campus</li><li>Reviewing of internet</li></ul>				
Forms of teaching	The material will be presented at a level suitable for undergraduates by lecturing, discussion, video, power points and seminar				
		Task	Weight (Marks)	Due Week	Relevant Learning Outcome
	Paper Review		50%		Encourages students to
Evaluation	<b>Evaluation</b> Assignments	Homework	5% 2%		search for more detailed knowledge relevant to the topics taught at campus.
		Class Activity	270		
	ents	Seminar	10%		Enhances the preparation and presenting skills of the students
		report	10%		To make students engage

					more with their favorite topics
		Project			
	Qui	Z	8%		To encourage students, study every week.
	Midterm Exam 2		25%	6	To evaluate students and their achievements at the middle of the term.
	Final Exam 40		40%	6	Final evaluation and assessment.
	Tota	al	100	)%	
Specific learning outcome:	•	By c Describing of Describe the r Beside this, th Describe initia excitable cells Differentiate the Elucidates how will take place	ompleti human regulatio he main ation and s (nerve, between w respira	transporting mechar l transmission of ele muscle and glands) the function of diffe	tudents can: rately mechanisms of cells. nisms of the body. ctrical signals from
Course References:	<ul> <li>Books:</li> <li>1-Review of medical physiology 23rd edition (2020) by Ganong</li> <li>2-Physiology (Board Review Series ) 4th edition by Linda S Costanzo (2007)</li> <li>3- Principles of Animal Physiology By Moyes, C.D. and Schulte, P.M.(2006)</li> <li>4-Human Physiology by German (2006)</li> <li>5- Physiology by Stuart Ira Fox, 11th edition (2009). McGraw Hill Higher Education</li> <li>6-Textbook of Medical Physiology by Guyton 12<sup>th</sup> edition (2019)</li> <li>7-Anatomy and physiology of human body</li> <li>8-Basic of anatomy and physiology</li> </ul>				
Course topics (Theory)		Week	Learning Outcome		
Introduction to physiology and homeostasis		First	Introducing some primary information about anatomy and physiology and the consequences of the practicing them in laboratory beside that		

An overview about types of tissue	Second	giving some bio hazardous precautions about laboratory and ethical rules in treating with human and biological spacemen's Showing types of tissue in
		practice and understanding differentiation between them
Integumentary system	Third	Demonstration of parts of integumentary system with describing the layers and components of each part by using microscope and available tools
Bone and skeletal system of human body	Fourth	Identification of name, location and function of each human body skeleton by using manufactured body skeleton in lab
Membrane transport	Fifth	Manual demonstration of egg osmosis and red blood cell tonicity and seeing the phenomena practically
Muscle anatomy and physiology	Sixth	Frog dissecting and introducing to the exact mechanism of muscle contraction nerve conduction
Cardiovascular anatomy and physiology	Seventh	Teaching measuring blood pressure and manual dissecting of animal heart
Anatomy of nervous system	Eighth	Showing different human reflex by using simple tools in lab
Gastrointestinal anatomy & physiology	Ninth	Introducing digestive tract by using anatomical doll with experimenting different digestive enzymes

Sensory and vision	Tenth	Snellen chart, vision acuity, color blindness, taste and hearing
Respiration, ventilation and gas exchange	Eleventh	Using spirometer to calculating lung capacity
Reproduction system	Twelfth	Showing reproductive organs by using anatomical dolls in lab
Renal physiology	Thirteenth	Showing how kindey work and complete mechanism of urine formation
Acid base balance	Fourteenth	Advance study of kidney

#### **Questions Example Design (theoretical and practical exam):**

All of the activities provided in the workload section are considered when awarding you a grade for this course. In order to pass this course, you will need to earn a 60% or higher on the final exam. Your score on the exam will be calculated as soon as you complete it. If you do not pass the exam on your first try, you may take it again in the second trial.

- Type of the exam (composition and multiple choice)
- Exam's duration (for example one hour)
- The number of the questions: at least four questions. The marks distributed evenly throughout.

The answer should contain preface, main contents and conclusion.

Example

 $Q1\$  Match the term of A column with the only one correct answer of B column  $\$  (3marks)

A	В
1- Clavicle	A-sebaceous gland
2-Horizontal	B-Cervical
3-Thyroid gland	C-Pectoral girdle
4-Rib	D-Endocrine
5-Atlas	E-Floating
6-sebum	F-Transverse

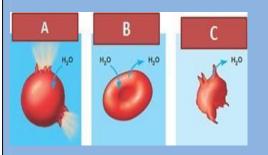
Q2/Fill in blanks with the correct answer. (5marks)

1-.....is microscopic study of the tissues; also known as microscopic an anatomy while, ...... Is the study of structural change associated with disease.

2-.... means nearer to the shoulder joint or the hip joint, while ..... means further away from the shoulder joint or the hip joint.

3- ..... it is specialized for absorption, and filtration with minimal wear & tear. It is a single layered

Q3/ According to the tonicity identify type of solution in A, B and C



**Extra notes:** 

#### **External Evaluator**