Module (Course Syllabus) Catalogue

2022-2023

College/ Institute	Erbil Medical Technical Institute	
Department	MLT Department	
Module Name	Human Physiology and Anatomy	
Module Code	PHA 105	
Degree	1	
Semester	1	
Qualification	Master degree	
Scientific Title	lecturer	
ECTS (Credits)	8	
Module type	Prerequisite ☐ Core ■ Assist. ☐	
Weekly hours	4	
Weekly hours (Theory)	(2)hr Class	(3)Total hrs Workload
Weekly hours (Practical)	(2)hr Class	(1)Total hrs Workload
Number of Weeks	16	
Lecturer (Theory)	Mustafa Hamadamin Rasool	
E-Mail & Mobile NO.	m.mustafa@epu.edu.iq	
Lecturer (Practical)		
E-Mail & Mobile NO.		
Websites	https://academicstaff.epu.edu.iq/faculty/muharam.mohammed	

Course Book

Course Description	This course, which consists of (2) hours lecture & (2) hrs lab per week for (12) weeks, is an introduction to Human physiology and anatomy ,the systems that present in human body &explain how they work and how they do their specific function and also explain the biological relation between these systems .
Course objectives	The purpose of this course is to enable the student to gain familiarity with Emphasis is placed upon component and physiological characteristics of each system in human body and their function At the conclusion of this course the student should be able to demonstrate through written examinations, quizzes, and oral discussion the following achievements: 1. Demonstrate and understanding of basic physiological concepts that relate to Human body and anatomy of the human body 2. Explaining of the physiological processes at the level of cell, tissues and body organs. 3. Demonstrate an understanding of different diseases in reflects to the normal body mechanisms 4. Organs. 5. Demonstrate basic laboratory skills.
Student's obligation	The students should be attendance and complete of all tests, exams and assignments

Required Learning Materials	lecture halls with data show equipment for lecture presentations, white board, overhead projector, posters				
Evaluation	**Task**		**Weight (Marks)**	**Due Week**	**Relevant Learning Outcome**
	Paper Review		1	1	
	Assignments	Homework	0.5	4	
		Class Activity	2	2	
		Report	1	1	
		Seminar	1	1	
		Essay	0	0	
		Project	0	0	
	Quiz		1	4	
	Lab.		2	12	
	Midterm Exam		1	2	
	Final Exam		1	3	
Specific learning outcome:	- **On successful completion of this program, graduates will be able to** 1- Identify evaluate and apply major theoretical traditions in human anatomy and physiology 2- Understand how the human body work. 3- Personal save				
Course References:	Anatomy and physiology, 7th Edition by Seeley, Stephen and Tate 2-Human Physiology, 9th Edition by Stuart and Fox. 3- Vanders Human Physiology (the mechanisms of body function). 11th edition. By Eric P. widmaier				

Course topics (Theory)	Week	Learning Outcome
Introduction to medical human anatomy and physiology	1	Able to knowing the general principle of cells, tissue, organs
Transport through the biological membranes	2	Be able to knowing all the types of methods in transporting material across the biological membrane
Circulatory cardiovascular system	3	Must be able to knowing all the part of the system and its functions
Cellular part of blood (RBC and WBC)	4	Be able to knowing all types of blood cells and their functions
Muscle physiology and anatomy	5	Be able to know every parts of muscle system part and their functions
Neurophysiology and anatomy	6	Be able to know every parts of nervous system part and their functions
Urinary system and renal physiology	7	Be able to know every parts of renal system part and their functions
Respiratory system	8	Be able to know every parts of Respiratory system part and their functions
Gastrointestinal system physiology	9	Be able to know every parts of Gastrointestinal system part and their functions
Reproductive system	10	Be able to know every parts of Reproductive system part and their functions
THE ENDOCRINE SYSTEM	11	Be able to know every parts of Sensory organs part and their functions
THE INTEGUMENTARY SYSTEM	12	Be able to know every parts of skin organs part and their functions
Practical Topics	**Week**	**Learning Outcome**
Microscopic component and its uses	1	Be able to knowing all parts and their functions and how to use of microscope
Blood bank, blood drawing		Be able how to draw blood sample
Blood smear and staining		Be able how to make a blood smear and detection of different types of blood sample in it
Haemoglobin estimation using sahli and drabkin dsolution		Be able to know how blood can be estimate
Blood group and rhesus factor		Being able to know how to detection the types of blood group
Packed cell volume		Be able to practice on how can determination the ration of the PCV
Bleeding and clotting time		Be able to knowing how to detect the rate of bleeding and clotting rate

Blood pressure estimation and detection body temperature		Be able how to detect blood pressure and thermal detection
Spirometer for detecting Respiratory volume of the lungs		Be able to detect the repiratory volume of the lung
R.B.C. count		Be able to count RBC on microscope slide
W.B.C count		Be able to count WBC on microscope slide
Erythrocyte sedimentation rate		Be able to estimate the rate of E.S.R

Questions Example Design

- **Examinations (question design):**

Q/ what is the type of blood group and why agglutination is occur in different blood group?
Q/ true or false type of exams:
a-sugar are digested in stomach
b- neuron cell occur in renal system
Q/multiple choice:

1- The body temperature is----------

a- 38 b- 39 c-37

Extra notes:

External Evaluator

The outcome of course book evaluation is commonly more explicit and follows the principles and rules in general.

Tahseen Abdah Abdulla