

Kurdistan Region Government

Ministry of Higher Education and Scientific Research

Erbil Polytechnic University

**Module (Course Syllabus) Catalogue**

**2022-2023**

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| **College/ Institute** | **Medical technical institute** | |
| **Department** | **Anaesthesia** | |
| **Module Name** | **Physiology and Anatomy** | |
| **Module Code** | **PMP203** | |
| **Degree** | **Technical Diploma Bachler High Diploma Master PhD**  \ | |
|  | **first** | |
| **Qualification** | **Master degree in Medical Microbiology** | |
| **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** | **14** | |
| **Lecturer (Theory)** | **Tahseen Abdah Abdullah** | |
| **E-Mail & Mobile NO.** | [**tahseen.abdullah@epu.edu.iq**](mailto:tahseen.abdullah@epu.edu.iq)  **07504236395** | |
| **Lecturer (Practical)** | **Tahseen Abdah Abdullah** | |
| **E-Mail & Mobile NO.** | [**tahseen.abdullah@epu.edu.iq**](mailto:tahseen.abdulla@epu.edu.iq)  **07504236395** | |
| **Websites** |  | |

**Course Book**

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| **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** | * **Course objective:**   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   1. Explaining of the physiological processes at the level of cell, tissues and body organs. 2. Demonstrate an understanding of different diseases in reflects to the normal body mechanisms 3. Organs. 4. Demonstrate basic laboratory skills. | | | | | |
| **Student's obligation** | **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. | | | | | |
| **Evaluation** | ‌ **Task** | | **Weight (Marks)** | | **Due Week** | **Relevant Learning Outcome** |
| Paper Review | |  | |  |  |
| Assignments | Homework | 4 | |  |  |
| Report | 10 | |  |  |
| Seminar | 10 | |  |  |
| Paper | 10 | |  |  |
| Quiz | | 10 | |  |  |
| Lab. | |  | |  |  |
| Midterm Exam | | 16 | |  |  |
| Final Exam | | 40 | |  |  |
| Total | |  | |  |  |
| **Specific learning outcome:** | - **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.   1. Personal save. | | | | | |
| **Course References‌:** | * **Course Reading List and References‌:**  1. -Anatomy and physiology, 7th Edition by Seeley, Stephen and Tate 3. 2-Human Physiology, 9th Edition by Stuart and Fox. 4. 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 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 (Nervous system) | | | | 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 |
| Sensory organs | | | | exam | | Be able to know every parts of Sensory organs part and their functions |
|  | | | |  | |  |
| * **Practical Topics (If there is any)** | | | | **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 | | | | 2 | | Be able how to draw blood sample |
| Blood smear and staining | | | | 3 | | 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 | | | | 4 | | Be able to know how blood can be estimate |
| Blood group and rhesus factor | | | | 5 | | Being able to know how to detection the types of blood group |
| Packed cell volume | | | | 6 | | Be able to practice on how can determination the ration of the PCV |
| Bleeding and clotting time | | | | 7 | | Be able to knowing how to detect the rate of bleeding and clotting rate |
| Blood pressure estimation and detection body temperature | | | | 8 | | Be able how to detect blood pressure and thermal detection |
| Spirometer for detecting Respiratory volume of the lungs | | | | 9 | | Be able to detect the repiratory volume of the lung |
| R.B.C. count | | | | 10 | | Be able to count RBC on microscope slide |
| W.B.C count | | | | exam | | Be able to count WBC on microscope slide |
| * **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------------------------** 2. **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.**  **Sevan Hasan Baker** | | | | | | |