

**Human Biology Course Catalogue**

**2022-2023**

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| **College** | **Erbil Health Technical** | |
| **Department** | **Medical Laboratory Technology** | |
| **Module Name** | **Human Biology** | |
| **Module Code** | **HUB105** | |
| **Semester** | **1** | |
| **ECTS** | **7** | |
| **Module type** | **Basic** | |
| **Weekly hours** | **16** |  |
| **Weekly hours (Theory)** | **(2)hr** |  |
| **Weekly hours (Practical)** | **(12)hr** |  |
| **Lecturer (Theory)** | **Dr. Layla Abdulsattar & Dr.Hero Khalid** | |
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| **Lecturer (Practical)** | **Dr. Layla Abdul star &Dr.Hero Khalid** | |
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**Course Book**

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| * **Course overview:**   Human Biology is the study of Human Anatomy (structure) and Physiology (function). This course includes detailed discussion of all body systems and their interrelationships in health and disease. Class discussions are supplemented by regular reading in the textbook and enriched with additional selected readings. This course includes laboratory activities and dissection of relevant tissue. The study of the human body is vocabulary intensive. Emphasis will be put on learning key word roots to help students acquire the necessary vocabulary in order to understand and communicate in the language of science. | | |
| * **Course objective:**   Upon successful completion of this course, the student will be able to do the following:  1. demonstrate an understanding of the cell as the basic unit of structure and function in the body  2. name the major systems of the human body and describe their general operation and role in maintaining homeostasis  3. demonstrate an understanding of the energy needs of the body and relate them to nutritional requirements  4. identify the physiological components of common diseases including cancer, diabetes, heart disease, and stroke  5. integrate the guidelines for healthy living and understand the reasons why they were established  6. link particular health concerns to specific system physiology. | | |
| * **Student's obligation**   1. Attendance: student should make every effort to maintain attendance in the class.  2. Participation: each student should participate in the classroom, discussing relevant subjects at appropriate times and produce valuable debates.  3. Respect: students need to respect the teachers and their classmates, also to respect the ideas and opinions of other colleagues and not ridicule them for having a different viewpoint.  4. Preparation: students should complete the assignments entrusted to him before attending the class. | | |
| * **Forms of teaching**   Theory: lecture halls with computers equipment for lecture presentations, white board, overhead projector, posters  Laboratory practice: Laboratory with equipment for training, white board, computer with equipment for PowerPoint presentations, overhead projector, posters  Field practice: equipment available in various settings  General: library, computer suite with internet access | | |
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| **.Student learning outcome:**   1. The student will develop an understanding of body systems and their function. 2. The student will learn the anatomical structures of the body systems. 3. The student will learn the functions of the anatomical structures in the body.   4.The student will develop an understanding of health issues that affect body system | | |
| * **Course Reading List and References‌:**  1. VALERIE C. SCANLON and TINA SANDERS (Essentials of Anatomy and Physiology, 7th Ed) 2. JENNIFER ELLIE (Visualizing Human Biology, Lab Manual) | | |
| * **Course topics (Theory)** | **Week** | **No. of Hours** |
| 1st lec. Organization and General plan of the body | 1 | 2 |
| 2nd lec Cell Structure and Function | 2 | 2 |
| 3nd lec. Mitosis, Meiosis & Cell Cycle. | 3 | 2 |
| 4rd lec. Epithelium | 4 | 2 |
| 5th lec. Epithelial junction ,glands and surface modification | 5 | 2 |
| 6th lec. Connective tissue | 6 | 2 |
| 7th lec. Bone cartilage | 7 | 2 |
| 8th lec. Muscle | 8 | 2 |
| 9th lec. Gastrointestinal tract | 9 | 2 |
| 10th lec. Respiratory system | 10 | 2 |
| 11th lec. Urinary system | 11 | 2 |
|  | 12 | 2 |
| * **Practical Topics** | **Week** | **No. of Hours** |
| 1st lab . how to use microscope | 1 | 3 |
| 2nd lab.. Observing Cells with light microscope | 2 | 3 |
| 3rd lab Observing Mitosis of Onion Root tip | 3 | 3 |
| 4th  lab. . Observing epithelium with light microscope | 4 | 3 |
| 5th lab Observing glands with light microscope | 5 | 3 |
| 6th lab. Observing connective tissue with light microscope | 6 | 3 |
| 7th lab. Observing muscles with light microscope | 7 | 3 |
| 8th lab. Observing blood cells with light microscope | 8 | 3 |
| 9th lab. Observing types of bacteria with light microscope | 9 | 3 |
| 10th lab. How you take blood from patient | 10 | 3 |
| 11th lab. Blood film and How you make blood smear | 11 | 3 |
| 12th lab. Blood groups | 12 | 3 |
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| * **External Evaluator** | | |