**Course Description**

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| **Faculty** | **Pharmacy** | | | | | | |
| **Department** | **Clinical Pharmacy** | | | **Level** | | |  |
| **Course** | **Physiology** | **Code** | **1702252** | **Prerequisite** | | | 1702104 |
| **Credit hours** | 3 | **Theoretical** | 3 | **Practical** | | | 0 |
| **Coordinator** | Einas Al Manasrah | **Email** |  | | | | |
| **Teachers** | Abeer Kharshid | **Emails** |  | | | | |
| **Lecture Time** |  | **Place** |  | | **Attendance mode** |  | |
| **Semester** |  | **Preparation date** |  | | **Modification Date** |  | |

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| **Abstracted Course Description** |
| This course provides a comprehensive exploration of the normal functioning of the human body at the cellular, organ, and systemic levels. Students will delve into the mechanisms that maintain homeostasis, regulate physiological processes, and contribute to overall health. The course integrates theoretical knowledge with practical applications to understand the complexities of human physiology. |
| **Course Goals** |
| * To develop a thorough understanding of human physiological processes. * To correlate cellular and organ system functions in maintaining homeostasis. * To analyze the integration and regulation of various physiological systems. * To apply physiological principles to interpret real-world scenarios. |

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| **CILOs** |
| **Knowledge** |
| a1. Describe the fundamental principles of cell physiology.  a2. Identify and explain the functions of major organ systems.  a3. Understand the mechanisms of homeostasis in the human body.  a4. Explain the integration and coordination of physiological processes. |
| **Skills** |
| b1. Analyze and interpret physiological responses to different stimuli.  b2. Correlate cellular processes with overall organ function.  b3. Apply physiological concepts to practical scenarios.  b4. Utilize critical thinking to solve problems related to human physiology. |
| **Competencies** |
| c1. Demonstrate a deep understanding of physiological principles.  c2. Apply knowledge to analyze and interpret real-world physiological challenges.  c3. Develop effective problem-solving skills in the context of human physiology.  c4. Communicate complex physiological concepts clearly. |
| **Learning Methods** |
| * Lectures covering fundamental pathophysiological concepts. * Case studies and group discussions on clinical applications. |
| **Evaluation Tools** |
| Quizzes, Midterm exam, Final Exam |

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| **Week** | **Topics** | **Learning methods** | **Evaluation tool** | **ILOs** | **Hours** |
| **1.** | Introduction and outlines | Practical exercises | Quizzes | A1,2b1 | **3** |
| **2.** | Physiological anatomy of the heart | Practical exercises | Midterm exam | A2,3 | **3** |
| **3.** | The conducting system of heat | Practical exercises | Midterm exam | A2,1 | **3** |
| **4.** | The electrocardiogram | Case studies | Midterm exam | A1,2b2 | **3** |
| **5.** | The cardiac cycle and cardiac output | Case studies | Midterm exam | B3,2 | **3** |
| **6.** | The control of heart rate | Case studies | Midterm exam | C1,c2 | **3** |
| **7.** | Mean arterial blood pressure | Lectures | Midterm exam | C4,2b3 | **3** |
| **8.** | Midterm Exam | Lectures |  | A2,4,3 | **3** |
| **9.** | Overview of digestive system | Lectures | Midterm exam | A1,2 | **3** |
| **10.** | Gastrointestinal tract functions | Lectures |  | B1,4 | **3** |
| **11.** | Pulmonary ventilation | Lectures | Midterm exam | C2,4 | **3** |
| **12.** | Lung volume and capacity | Lectures |  | A1b2 | **3** |
| **13.** | Exchange and Transport of oxygen and carbon dioxide | Lectures | Final Exam | A2,b3 | **3** |
| **14.** | Regulation of pulmonary function | Lectures | Final Exam | B1,2 | **3** |
| **15.** | Final Exam |  | Final Exam |  | **2** |

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| **Plan of Course Evaluation** | | | | | | | | | | | |
| **Evaluation Tools** | | **Mark** | **ILOs** | | | | | | | | |
| **A1** | **A2** | **A3** | **B1** | **B2** | **B3** | **C1** | **C2** | **C3** |
| **First Exam (Mid-term)** | | **30%** | \* | \* |  |  | \* |  |  |  | \* |
| **Second Exam (If available)** | |  |  |  |  |  |  |  |  |  |  |
| **Final Exam** | | **50%** |  |  |  |  |  | \* | \* | \* |  |
| **Activities** | | **20%** |  | | | | | | | | |
| **Activities Evaluation** | Homework/Tasks | 10% |  |  |  | \* | \* |  | \* |  |  |
| Case Study |  |  |  |  |  |  |  |  |  |  |
| Discussion and Interactions |  |  |  |  |  |  |  |  |  |  |
| Group Activities |  |  |  |  |  |  |  |  |  |  |
| Laboratory Exams |  |  |  |  |  |  |  |  |  |  |
| Presentations |  |  |  |  |  |  |  |  |  |  |
| Quizzes | 10% |  | \* |  |  | \* | \* |  |  | \* |
| Others |  |  |  |  |  |  |  |  |  |  |
| **Total** | | 100% |  |  |  |  |  |  |  |  |  |

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| **Components** | |
| **Book** |  |
| **References** |  |
| **Recommended Readings** |  |
| **Electronic materials** |  |
| **Other websites** |  |