**Course Description**

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| **Faculty** | **Pharmacy** |
| **Department**  | **Clinical Pharmacy** | **Level** |  |
| **Course**  | **Pathophysiology** | **Code** | **1702204** | **Prerequisite** | 1702252 |
| **Credit hours** | 3 | **Theoretical**  | 3 | **Practical** |  |
| **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**  |
| The course provides an in-depth exploration of the pathophysiological mechanisms underlying various diseases and disorders. Students will gain a comprehensive understanding of how alterations in normal physiological processes contribute to the development and progression of illnesses. Emphasis will be placed on the integration of molecular, cellular, and organ system levels of pathology. |
| **Course Goals** |
| * To comprehend the fundamental concepts of pathophysiology.
* To correlate molecular and cellular changes with clinical manifestations of diseases.
* To analyze the interplay between genetics, environment, and pathophysiological processes.
* To develop critical thinking skills in linking pathological changes to clinical scenarios.
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| **CILOs** |
| **Knowledge** |
| a1. Describe the normal physiological processes in various organ systems.a2. Identify key molecular and cellular changes associated with common diseases.a3. Understand the genetic and environmental factors influencing pathophysiology.a4. Explain the clinical manifestations of diseases at different stages. |
| **Skills** |
| b1. Analyze and interpret pathological changes in tissues and organs.b2. Correlate molecular and cellular alterations with clinical symptoms.b3. Apply pathophysiological concepts to clinical case studies. |
| **Competencies** |
| c1. Demonstrate a deep understanding of pathophysiological concepts.c2. Apply knowledge to analyze and interpret real-world clinical scenarios.c3. Develop effective problem-solving skills in the context of pathophysiology. |
| **Learning Methods** |
| * Lectures covering fundamental pathophysiological concepts.
* Case studies and group discussions on clinical applications.
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| **Evaluation Tools** |
| Quizzes, Midterm exam, Final Exam |
| **Week** | **Topics** | **Learning methods** | **Evaluation tool** | **ILOs** | **Hours** |
| **1.** | Introduction to pathophysiology course | Lecture material and notes | Exams | **A2,a3,b1,b3,c2,c3** | **3** |
| **2.** | Introduction &cell and basic terms of pathophysiology, General Features of Inflammation | Homework and Projects, Presentation, … | Assignments, | **A2,a3,b1,b3,c2,c3** | **3** |
| **3.** | Pathologic Aspects of Repair, Edema, Thrombosis, Embolism, Infarction & Shock | Lecture material and notes  | Exams | **A2,a3,b1,b3,c2,c3** | **3** |
| **4.** | Pathophysiology of gastrointestinal tract diseases | Homework and Assignments, Projects, Presentation, … | Exams | **A1,a2,b1,b2,c1** | **3** |
| **5.** | Pathophysiology of gastrointestinal tract diseases 2 | Lecture material and notes  | Exams | **A1,a2,b1,b2,c1** | **3** |
| **6.** | Pathophysiology of respiratory system diseases | Lecture material and notes  | Exams | **A1,a2,b1,b2,c1** | **3** |
| **7.** | Pathophysiology of respiratory system diseases 2 | Homework and Assignments, Projects, Presentation, … | Exams | **A1,a2,b1,b2,c1** | **3** |
| **8.** | Midterm Exam | Lecture material and notes  | Exams | **A2,a3,b1,b3,c2,c3** | **3** |
| **9.** | Pathophysiology of cardiovascular system diseases | Lecture material and notes  | Exams | **A2,a3,b1,b3,c2,c3** | **3** |
| **10.** | Pathophysiology of cardiovascular system diseases 2 | Lecture material and notes  | Exams | **A2,a3,b1,b3,c2,c3** | **3** |
| **11.** | Pathophysiology of Renal system diseases | Lecture material and notes | Exams | **A2,a3,b1,b3,c2,c3** | **3** |
| **12.** | Pathophysiology of Endocrine system diseases | Lecture material and notes | Exams | **A1,a2,b1,b2,c1** | **3** |
| **13.** | Pathophysiology of blood system diseases | Presentation | Presentation, project, assignments | **A1,a2,b1,b2,c1** | **3** |
| **14.** | Pathophysiology of Cerebrovascular Diseases | Presentation | Presentation, project, assignments | **A1,a2,b1,b2,c1** | **3** |
| **15.** | Final Exam |  |
| **16.** |  |  |  |  |  |

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| **Plan of Course Evaluation** |
| **Evaluation Tools** | **Mark** | **ILOs** |
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| **First Exam (Mid-term)**  | **30%** | **A1,a2,b1,b2,c1** |  |  |  |  |  |
| **Second Exam (If available)** |  |  |  |  |  |  |  |
| **Final Exam** | **50%** | **A1,A2,a3,b1,b2,b3,,c1c2,c3** |  |  |  |  |  |
| **Activities** |  |  |
| **Activities Evaluation** | Homework/Tasks | 10% | B1.B2,B3C1 |  |  |  |  |  |
| Case Study  |  |  |  |  |  |  |  |
| Discussion and Interactions |  |  |  |  |  |  |  |
| Group Activities |  |  |  |  |  |  |  |
| Laboratory Exams |  |  |  |  |  |  |  |
| Presentations |  |  |  |  |  |  |  |
| Quizzes | 10% | **A1,a2,b1,b2,c1** |  |  |  |  |  |
| Others |  |  |  |  |  |  |  |
| **Total** | 100% |  |  |  |  |  |  |

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