





#### **Planning and Quality Assurance Affairs**

#### Form (A)

# **Course Specifications**

### **General Information**

Pathphysiology 1 Course name PHPT3204 Course number **Faculty Department** Major Needs **Course type** 3 **Course level** 2 **Credit hours (theoretical)** 0 **Credit hours (practical) Course Prerequisites** 

### **Course Objectives**

- 1 To introduce the students to the science of pathophysiology and how it relates to other important medical sciences as pharmacology and therapeutics
- 2 To explore the abnormal functioning of the diseased organs and how this applies to medical treatment and patient care

## **Intended Learning Outcomes**

Knowledge and Understanding	<ul> <li>To understand the concept of "health" and "disease" and sciences related to them</li> </ul>		
	* To be aware of the terminology related to the different aspects of disease		
	* To understand the concepts of "adaptation" and "injury", the different mechanisms underlying them, and the differences between these two processes in their relation to the development of disease		
	<ul> <li>To understand the immune system and how it functions in health and disease</li> </ul>		
	<ul> <li>To understand inflammation and healing</li> </ul>		
	<ul> <li>To get an in-depth understanding of the process of carcinogenesis, and how cancer is presented, diagnosed and treated</li> </ul>		
	<ul> <li>To get an in-depth understanding of the major diseases related to the cardiovascular system</li> </ul>		
Intellectual Skills	<ul> <li>To be able to conclude what clinical manifestations are expected from a certain diseae process</li> </ul>		
	<ul> <li>To be able to predict what disease is affecting a certain patient based on clincial and laboratory data</li> </ul>		
	<ul> <li>To understand the rationale behind the use of different treatment options for different diseases</li> </ul>		
Professional Skills	* To form a sceintific background that can help students understand courses related more directly to the profession of pharmacy, such as pharmacology and therapeuitcs, which can improve their future capabilities in caring with their patients		
General Skill	* Problem-solving skills		
	* Presentation skills		

#### **Course Contents**

- 1 Introduction to pathophysiology
- 2 Tissue adaptation and injury
- 3 Neoplasia
- 4 Immunity and the immune system
- 5 Inflammation, tissue repair and wound healing
- 6 Allergic and hypersensitivity reactions
- 7 Alteration in hemostasis and blood coagulation
- 8 Alteration in blood pressure
- 9 Alteration in cardiac function
- 10 Heart failure and circulatory shock

### **Teaching and Learning Methods**

- 1 Lecture
- 2 Case studies
- 3 Discussions

## **Students Assessment**

Assessment Method	<u>TIME</u>	MARKS
Midterm Exam	7th week	40
Assignment	submitted before the final examination peroid	10
Final Exam	During the final	50

examination period

# **Books and References**

Essential books	Essentials of pathophysiology, 4th edition. By: Carol Mattson Porth. Walters Kluwer 2015
Recommended books	Pathology and therapeutics for pharmacists: a basis for clinical pharmacy practice, 3rd
	edition. By: Russell J Greene and Norman D Harris. Pharmaceutical Press. 2008