

Course Title:	Principles of Physiology, Biochemistry & Pharmacology
Course Code:	PHSL215
Program:	Bachelor of Medicine and Bachelor of Surgery (M.B.B.S)
Department:	Basic Medical Science
College:	College of Medicine
Institution:	AlMaarefa University

Course Identification

1.	Credit hours:	4(2+2+0)						
2. Course type								
a.		University	College	/	Department	Others		
b.		Required		Elective				
3. Level/year at which this course is offered: Year 2-Level 3								
4. Pre-requisites for this course (if any): ENG104, BIOL101, CHEM101, PHYS101								
5. Co-requisites for this course (if any): None								

Course Objectives

1. Course Description

This course, together with PATH 216 and ANAT214, lays the foundation for subsequent courses along the road of undergraduate Medical Education. This course introduces the medical student to the basic principles of physiology, biochemistry and Pharmacology.

2. Course Main Objective

By the end of this course, students are expected to:

- Know the structural and functional organization of cell
- Understand the general concept of homeostasis.
- Recognize the basic physiological concepts like,
 - Composition of different fluid compartment and water balance
 - Properties of excitable tissues
 - Organization of nervous system
 - Principles of intercellular communication.
 - Basic principles related to autonomic control.
- Understand the basic molecular chemistry and structure
- Identify the various control and integrating mechanisms of the diverse biochemical events in different metabolic processes.
- Appreciate how derangement of metabolic process and biochemical mechanisms are involved in causation of disease process
- Understand the nature and nomenclature of drugs.
- Compare and contrast the processes of pharmacokinetics and pharmacodynamics.
- Integrate the physiology processes and biochemical pathways affecting ANS with modulations brought about by autonomic drugs used for therapeutic and diagnostic purposes.