UCL Université catholique de Louvain

WDENT1350

2010-2011

General pathophysiology of diseases

4.0 credits	45.0 h	1q

Teacher(s) :	Manicourt Daniel ;
Language :	Français
Place of the course	Bruxelles Woluwe
Main themes :	The first part explores and explains the development of basic pathologic mechanisms without detailing the additional specific changes occurring in different organs. After having reviewed the basic aspects of cell adaptation to altered environment and the major abnormalities of interstitial tissues, we analyze host response to injury, major agents causing tissue injury as well as disorders of growth and development. In the second part, the pathologic mechanisms discussed in the first part are related to various organ systems: heart, blood cells and bleeding disorders, lung, gastrointestinal tract, pancreas, liver, kidneys, the endocrine system, bone and joints, the peripheral nerve and skeletal muscle as well as the central nervous system.
Aims :	In approaching the disease as a disorder of physiologic and biochemical processes, the teaching enables the student to understand how and why the symptoms and signs of different disease syndromes occur, so that rational therapies and prevention of diseases can be devised. The course is a logic continuation of basic sciences and provides the foundations to foster understanding of the lectures in clinical medicine and pharmacology. We integrate into the discussion of pathologic processes and disorders the newest established information available at the genetic and molecular levels. Emphasis in given on the oral manifestations of diseases. *The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".*
Content :	In the first part we consider the pathologic changes occurring in the prototype of every tissue of the body : parenchymal cells and interstitial connective tissue. The physiologic and biochemical changes are related to symptoms and signs as well as to laboratory findings. Emphasis is given to inflammatory changes, nutritional and genetic diseases, disorders due to physical and chemical injuries, infectious diseases, disorders of cell growth, differentiation and maturation as well as mechanisms and causes of neoplasias. In the second part, for each system, normal structure and function, and the symptoms and signs that arise from pathologic changes are discussed first. The major disease avenues of each organ system are then overviewed with emphasis given to those that have oral manifestations.
Other infos :	Required : basic cell biology, basic physiology and basic biochemistry. Dynamic interactions between students and teacher. At the beginning of each lecture, a summary of the previous lecture is given and a student is invited to explain to his fellows how he understands the topic. Clinical illustrations of major syndromes
Cycle and year of study :	> Master [120] in Biochemistry and Molecular and Cell Biology > Bachelor in Dentistry
Faculty or entity in charge:	MDEN