COURSE (TITLE): PATHOLOGY

LECTURER: PROF.

YEAR and SEMESTER: Second year, second semester

CREDITS (CFU): 6

SECTOR (SDS): MED/08

ACADEMIC YEAR:

ASSESSMENT: In order to assess the knowledge and the attainment of the objectives, the modality of the examination is characterized by an oral exam, covering all the themes treated in the course. The student should be able also to describe images of macroscopic and microscopic anatomy regarding the most common and/or important diseases.

LOCATION: Department of Environmental, Biological and Pharmaceutical Science and Technologies, Via Vivaldi 43 Caserta

COURSE OBJECTIVES/OUTCOMES:

Principal objective of the course will be to teach students the general principles of human pathology, both from a molecular and morphological point of view. I detail, the molecular alterations causing the different pathologies will be defined; nevertheless, the macroscopic and microscopic phenotypes of the principal diseases will be illustrated. Final goal of the course will be the possibility for the students to apply this knowledge to their future research activities in the field of human pathology.

SYLLABUS (overview)

Pathology has always been regarded as the fulcrum of medicine that links the basic disciplines with clinical subjects. In the last twenty years, Pathology has advanced from being an entirely morphological and descriptive subject to one that deals with the most advanced molecular research and is at the front position of research in molecular pathology and cancer. Its study is aimed at elucidating the molecular basis of disease and to the definition of the macroscopic and microscopic phenotypes of the diseases.

SYLLABUS (Detailed description):

Principal aims of the course will be:

- 1) Knowledge of the morphological methods (cytodiagnostic and histopathology on biopsy) used in clinical and therapy for patients, including techniques used of the definition of the molecular characteristics of the pathologic tissue examined (immunohistochemistry, molecular biology techniques)
- 2) Knowledge of the principles of cell pathology (cellular adaptation to disease, cell injury and cell death)
- 3) Knowledge of the fundamental macroscopic and microscopic appearance of pathological processes and diseases: tissue responses to damage (acute and chronic inflammation), developmental and genetic diseases, neoplasia, basic immunopathology, infectious diseases, degenerative and multisystem diseases
- 4) Learning concepts of pathology which helps the student to correlate anatomo-cilnical

and laboratory data of medical and surgical conditions

5) Knowledge of the macroscopic and microscopic appearance of the diseases of the different organs and systems: 1) blood circulatory system; 2) respiratory system; 3) oral pathology; 4) alimentary tract pathology; 5) liver, biliary tract and pancreas pathology; 6) lymphoid and hemopoietic pathology; 7) endocrine pathology; 8) pathology of the urinary system; 9) pathology of the male genital system; 10) gynecologic and obstetric pathology; 11) breast pathology; 12) dermatopathology; 13) nervous system pathology; 14) bone and muscle pathology

TEXTBOOKS:

Stevens, Lowe, Scott: Core Pathology Wheater: Basic Histopathology (Atlas)

ADDITIONAL READING:

Robbins & Cotran: Pathologic Basis of Disease

Notes from the lessons

Curriculum Vitae