



The Hebrew University of Jerusalem

Syllabus

Pathology - general - For medical and Tzameret students - 96214

Last update 18-11-2024

HU Credits: 4

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: Medicine

Academic year: 0

Semester: 2nd Semester

Teaching Languages: Hebrew

Campus: Ein Karem

Course/Module Coordinator: Dr. Nir Pillar

Coordinator Email: nirpillar@hadassah.org.il

Coordinator Office Hours: Sunday-Thursday 8:00-15:00, by appointment

Teaching Staff:

Dr. Yakov Fellig,
Prof. Eli Pikarsky,
Dr. Karen Meir,
Dr. Tzahi Neuman,
Dr. Tal Keidar,
Dr. Nir Pillar

Course/Module description:

This course is presented in a frontal lecture format consisting of: introductory lectures into the general pathology of cellular injury/adaptation, inflammation and tissue repair, neoplasia, immune processes, amyloidosis, hemodynamic disorders, thrombosis and shock, genetic and metabolic diseases and diseases of infancy and childhood, infectious diseases and environmental injury. In addition there are 4 labs, two-hour long each, that include a slide seminar compatible with previous frontal lectures, divided into slide overview by the lecturer, and independent work using virtual microscopy, assisted by the teaching staff. A bibliography is provided for supplemental reading and histopathology atlas. At the end of the course there is a test based on lectures, presentations, required reading, and laboratory slides.

Course/Module aims:

- 1. To grant knowledge about cellular/tissue/organ morphological changes in reaction to stress/injury.*
- 2. To understand pathological processes and their mechanism, including: inflammation; autoimmunity, neoplasia, etc.*
- 3. To understand the relation between morphological and functional changes.*
- 4. To understand the relation between morphological changes and clinical presentation as a bases for clinical and therapeutic medicine.*

Learning outcomes - On successful completion of this module, students should be able to:

- 1. Recall pathological terminology*
- 2. Outline cellular/tissue/organ adaptation to stress/injury, and associate them with clinical presentation in various diseases.*
- 3. Describe the pathological processes observed in inflammation, repair, hemodynamic disorders, infectious diseases, autoimmune diseases and environmental injury*
- 4. Recognize certain genetic and metabolic diseases*
- 5. Classify neoplasms according to customary nomenclature, and recognize common molecular-genetic alterations and risk factors underlying neoplasia.*

Attendance requirements(%):

80% Minimum.

Teaching arrangement and method of instruction: Integration of frontal lectures (live or recorded), presentations, required reading in the course book and practical experience in reading pathology slides.

Course/Module Content:

- Introduction
- Cellular Responses to Stress and Toxic Insults: Adaptation, Injury, and Death
- Inflammation and Repair
- Hemodynamic Disorders, Thromboembolic Disease, and Shock
- Genetic and metabolic disorders, and diseases of Infancy and Childhood
- Diseases of the Immune System, including amyloidosis
- Neoplasia: Morphological/molecular features (genotype-phenotype relation)
- Infectious Diseases
- Environmental and Nutritional Diseases, including radiation injury

Required Reading:

Kumar, Abbas, Aster. Robbins & Cotran Pathologic Basis of Disease, 10th Edition 2021

Additional Reading Material:

Kumar, Abbas, Aster. Robbins Basic Pathology, 10th Edition 2018

Klatt, Robbins and Cotran Atlas of Pathology, 4th Edition 2020

Grading Scheme:

Written / Oral / Practical Exam 100 %

Additional information:

Changes in teaching arrangement/method of instruction, teaching staff and/or course assessment may occur subject to staff considerations or unpredictable events.

Subject to constraints, the finalizing test may be an online test.

