



Course Syllabus

Course Code	Course Title	ECTS Credits
BISC-523	Pathological Basis of Diseases	7.5
Prerequisites	Department	Semester
None	Life Sciences	Fall
Type of Course	Field	Language of Instruction
Required (Core)	Biomedical Sciences	English
Level of Course	Lecturer(s)	Year of Study
2 nd Cycle	Prof. Kyriacos Felekkis Dr. Myrtani Pieri	1 st
Mode of Delivery	Work Placement	Corequisites
Face-to-face	-	None

Course Objectives:

This course aims to provide students with basic information about structural changes in cells and tissues during different human diseases. The specific objectives of the course are to:

- Present the theory and application of various cellular changes and adaptations in human diseases
- Promote students' understanding of the process of inflammation and fibrosis and their relationship to pathologic conditions
- Increase awareness of the methods and techniques used in pathology.
- Empower students to acquire and apply information and knowledge to human diseases

Learning Outcomes:

After completion of the course students are expected to be able to:

1. Define the etiology, pathogenesis, and pathologic manifestation of diseases
2. Analyze normal physiological processes and symptoms of illnesses at the level of the cell and develop basic concepts and principles in patient care
3. Critically discuss the concepts of cellular pathologies, such as cell injury, cell death, adaptations, and aging
4. Define the inflammation and repair
5. Describe the basic features of Genetic disorders
6. Describe the basic features of Immunological and Infectious diseases
7. Describe the process of Neoplasia
8. Describe the basic features of diseases of infancy and childhood

Course Content:

<ol style="list-style-type: none"> 1. Introduction to Pathology 2. Cell injury and cell death 3. Cellular adaptations, intracellular accumulations, and cell aging 4. Inflammation (acute vs chronic) 5. Fibrosis 6. Hemodynamic disorders, thrombosis, and shock 7. Neoplasia 8. Genetic diseases 9. Diseases of the immune system 10. Infectious diseases 11. Disorders of childhood 12. Environmental and nutritional pathology
--

Learning Activities and Teaching Methods:

Lectures, discussions and problem-based learning
--

Assessment Methods:

Assignment; Midterm Examination; Final Examination.

Required Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
Robbins Basic Pathology, 9 th Edition	Kumar V., Abbas A.K., Aster J.C	Elsevier Sciences	(2012)	ISBN-10: 1437717810 ISBN-13: 978-1437717815

Recommended Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
Pathology at a glance, 1 st Edition	Finlayson C., Newell B.	Wiley-Blackwell	2009	ISBN-10: 1405136502 ISBN-13: 978-1405136501

Rapid Review in Pathology, Edition	Goljan E.F.	Elsevier Sanders	2013	ISBN-10: 0323087876 ISBN-13: 978- 0323087872
--	-------------	---------------------	------	---