COURSE DETAILS

" PATHOLOGICAL ANATOMY AND HISTOLOGY I "

SSD MED/08 *

DEGREE PROGRAMME: MEDICINE AND SURGERY
ACADEMIC YEAR 2024-2025

GENERAL INFORMATION – TEACHER REFERENCES

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Faculty 2023-2024	Position	Department	Reception (day/time/building)	e-mail
Massimo Mascolo	Associate Professor	Advanced Biomedical Sciences	By appointment	massimo.mascolo@unina.it
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Francesco Pepe	Researcher (A)	Public Health	By appointment	francesco.pepe4@unina.it

GENERAL INFORMATION ABOUT THE COURSE

INTEGRATED COURSE: Pathological Anatomy and Histology I
MODULE: Pathological Anatomy
SSD OF THE MODULE: MED08
TEACHING LANGUAGE: ENGLISH
CHANNEL: NA
YEAR OF THE DEGREE PROGRAMME: IV
SEMESTER: I
CFU: 5

REQUIRED PRELIMINARY COURSES (IF MENTIONED IN THE COURSE STRUCTURE "REGOLAMENTO")

Anatomy, Histology, Physiology, Physiopathology, General Pathology

PREREQUISITES (IF APPLICABLE)

For a proper understanding of the topics of the course the student must have acquired general knowledge on the cell morphology, tissue structure and functional organization (for each of body districts).

LEARNING GOALS

The learning objectives of this course are:
• Learn the morphologically detectable cellular, tissue and organ changes caused by disease. • Identify the relationship between signs, symptoms, and morphologically detectable which they cause. • Acknowledge the pathologist's role in disease prevention, diagnosis, prognosis, and treatment. • Become familiar with pathologic terminology. • Know the aims of the diagnostic autopsy examination. • Learn about the different types of biopsies and what to expect• Comprehend the purposes and limits of the intraoperative extemporaneous analysis • Know the morphology of the elementary lesions. • Critically engage with the ethical problems connected with the histological diagnosis (informed consent and professional responsibilities). • Understand the importance of collaborative communication between pathologists and other medical professionals • Assess the contribution of Pathology to "evidence-based medicine". • Frame the indications and limitations of cytology. • Understanding molecular biology and genetics basics helps diagnose and treat neoplastic diseases.

EXPECTED LEARNING OUTCOMES (DUBLIN DESCRIPTORS)

Knowledge and understanding

The student must know the main changes of the cells, tissues and organs caused by disease (macroscopic aspects and microscopic, immunohistochemical and molecular features). The course aims to provide the students with the essential methodological tools to understand the role of anatomic pathology in the diagnosis, prognosis, and response to treatment of inflammatory, degenerative, and neoplastic diseases. Finally, the course aims to highlight the importance of diagnostic autopsy and intraoperative histological examination.

Applying knowledge and understanding

The student must be able to define the role of cyto-histology in correctly defining prognostic and therapeutic aspects of neoplastic diseases. The student must use an appropriate diagnostic strategy

during the direct observation under the microscope and can sustain an interactive discussion with the teacher on images deriving from virtual cyto-histological preparations.

COURSE CONTENT/SYLLABUS

Pathology's crucial role in defining the disease's diagnosis and prognosis.
It will examine pathology's fundamental concepts, terminology, and practice as the discipline dedicated to understanding diseases' causes, mechanisms, and effects. It will treat the fundamental pathological processes in inflammation and reparative processes. Specific attention will be given to the morphology, phenotypical and molecular profile of the tumour, focusing on the role of pathologists in assessing prognostic and predictive tumour biomarkers. Pathology's role in modern personalized medicine and research will be evidenced.
It will give the students the key to facilitating a close integration between the clinical and imaging features and morphology. Finally, it will be explained the complementary diagnostic role of histopathology and cytopathology.
Endocrine pathology
Neoplastic and non-neoplastic diseases of the thyroid, parathyroids, cortical and adrenal medulla.
Gastrointestinal and liver pathology
Different techniques in the cytological and histological diagnosis. Main anatomical and histological frameworks of inflammatory digestive disease. Gastrointestinal, liver, and biliary tract pathology. Non-neoplastic and neoplastic pancreatic pathology.
Pathology of lymph nodes, bone marrow and spleen
Lymph node and bone marrow biopsy: morphological and immunophenotypic peculiarities. Most common lymphadenitis: cytological and histological features. Hodgkin lymphomas: cytological and histological features. Non-Hodgkin lymphomas: cytological and histological features. Molecular biology in lymphadenopathy. Spleen non-neoplastic and neoplastic diseases.
Skin disease
Role of skin biopsy in dermatology. Inflammatory disease: the most common architectural pattern. Basal, squamous cell and Merkel carcinoma. Melanocytic naevi. Melanoma. Cutaneous primary lymphoma.
Head and neck pathology
Preneoplastic and neoplastic lesions of the oral cavity, particularly on squamous cell carcinoma (SCC). HPV-related oropharyngeal carcinoma. Salivary gland non-neoplastic diseases and benign and malignant tumours.

SCHEDULE OF THE COURSE			
Week	**Day Hour 01.00-01.50 pm**	**Formal Lectures (ADF) and Integrative Didactic Activities (ADI)**	**Professor**
1st October 7th-10th, 2024	Monday-Thursday	Introduction to surgical pathology Different techniques in histological diagnosis	Massimo Mascolo (ADF 2) Gennaro Ilardi (ADI 2)
2nd October 14th-17th, 2024	Monday-Thursday	Introduction to cytopathology and molecular pathology	Claudio Bellevicine (ADF 2) Elena Vigliar (ADF 1) Umberto Malapelle (ADI 1)
3rd October 21st-24th, 2024	Monday-Thursday	Ancillary and molecular techniques in cytological and histological diagnosis	Caterina De Luca (ADI 2) Umberto Malapelle (ADI 1) Gennaro Ilardi (ADI 1)
4th October 28th31st, 2024	Monday-Thursday	Gastrointestinal pathology Molecular Testing for Gastrointestinal Cancer	Rosa Maria Di Crescenzo (ADF 2) Daniela Russo (ADF 1) Umberto Malapelle (ADF 1)
5th November 4th-8th, 2024	Monday-Thursday	Pathology of the liver, biliary tract and pancreas Cytology of the pancreas	Rosa Maria Di Crescenzo (ADF 2) Claudio Bellevicine (ADF 1) Gennaro Ilardi (ADI 1)
6th November 11th-14th, 2024	Monday-Thursday	Thyroid, parathyroid, adrenal cortical and medulla pathology: histology	Massimo Mascolo (ADF 2) Daniela Russo (ADF 1) Gennaro Ilardi (ADI 1)
7th November 18th-21st, 2024	Monday-Thursday	Thyroid, parathyroid, adrenal cortical and medulla pathology: cytology and molecular biology	Claudio Bellevicine (ADF 2) Elena Vigliar (ADF 1) Umberto Malapelle (ADI 1)
8th November 25th-28th, 2024	Monday-Thursday	Pathology of lymph nodes, bone marrow and spleen	Massimo Mascolo (ADF 2) Elena Vigliar (ADF 2)

9th November 2nd-5th, 2024	Monday-Thursday	Skin diseases	Massimo Mascolo (ADF 2) Daniela Russo (ADF 2)
10th December 9th-13th 2024	Monday-Thursday	Head and Neck pathology	Rosa Maria Di Crescenzo (ADF 2) Claudio Bellevicine (ADF 1) Gennaro Ilardi (ADI 1)

READINGS/BIBLIOGRAPHY

Robbins and Cotran: The Pathological Bases of Diseases - 2021 Publisher: Edra LSWR Edizioni Authors: Kumar V-Abbas A K-Aster J C-Robbins

TEACHING METHODS

Lectures and practical supplementary didactic activities

EXAMINATION/EVALUATION CRITERIA

*For **integrated courses**, this field should encompass all modules, with indication of the relative weight of each module on the final mark. For integrated courses, this field should be coordinated by the reference teacher for the course.*

a) Exam type:

*For **integrated courses**, there should be one exam.*

Exam type	
written and oral	
only written	
only oral	X
project discussion	
other	

In case of a written exam, questions refer to: (*)	Multiple choice answers	
	Open answers	
	Numerical exercises	

(*) multiple options are possible

b) Evaluation pattern: