

COURSE DETAILS

" PATHOLOGICAL ANATOMY AND HISTOLOGY I "

GSD 06MEDS/04 – ANATOMIA PATOLOGICA*

DEGREE PROGRAMME: MEDICINE AND SURGERY

ACADEMIC YEAR 2026-2027

GENERAL INFORMATION – TEACHER REFERENCES

COORDINATOR: Massimo Mascolo

PHONE: 081-7464532

EMAIL: massimo.mascolo@unina.it

Faculty 2025-2026	Position	Department	Reception (day/time/building)	e-mail
Massimo Mascolo	Associate Professor	Advanced Biomedical Sciences	By appointment	massimo.mascolo@unina.it
Umberto Malapelle	Associate Professor	Public Health	By appointment	umberto.malapelle@unina.it
Elena Vigliar	Associate Professor	Public Health	By appointment	elena.vigliar@unina.it
Daniela Russo	Associate Professor	Advanced Biomedical Sciences	By appointment	daniela.russo@unina.it
Rosa Maria Di Crescenzo	Researcher (A)	Advanced Biomedical Sciences	By appointment	rosamaria.dicrescenzo@unina.it

GENERAL INFORMATION ABOUT THE COURSE

INTEGRATED COURSE: Pathological Anatomy and Histology I

MODULE: Pathological Anatomy

SSD OF THE MODULE: GSD 06MEDS/04

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.

Role of digital pathology in histopathology.

SCHEDULE OF THE COURSE			
Week	Day Hour (	Formal Lectures (ADF) and Integrative Didactic Activities (ADI)	Professor
28/9/2026 01/10/2026	13:00-15:00 13:00-16:00	Introduction to surgical pathology Different techniques in histological diagnosis	Massimo Mascolo and Daniela Russo
06/10/2026 09/10/2026	13:00-15:00 13:00-16:00	Introduction to cytopathology and molecular pathology	Elena Vigliar and Umberto Malapelle
12/10/2026 16/10/2026	13:00-15:00 13:00-16:00	Ancillary and molecular techniques in cytological and histological diagnosis	Umberto Malapelle, Elena Vigliar and Daniela Russo
19/10/2026 23/10/2026	13:00-15:00 13:00-16:00	Gastrointestinal pathology Molecular Testing for Gastrointestinal Cancer	Rosa Maria Di Crescenzo, Daniela Russo and Umberto Malapelle
26/10/2026 30/10/2026	13:00-15:00 13:00-16:00	Pathology of the liver, biliary tract and pancreas Cytology of the pancreas	Rosa Maria Di Crescenzo and Elena Vigliar
02/11/2026 06/11/2026	13:00-15:00 13:00-16:00	Thyroid, parathyroid, adrenal cortical and medulla pathology: histology	Massimo Mascolo, Rosa Maria Di Crescenzo and Daniela Russo
09/11/2026 13/11/2026	13:00-15:00 13:00-16:00	Thyroid, parathyroid, adrenal cortical and medulla pathology: cytology and molecular biology	Elena Vigliar and Umberto Malapelle
16/11/2026 20/11/2026	13:00-15:00 13:00-16:00	Pathology of lymph nodes, bone marrow and spleen	Massimo Mascolo and Elena Vigliar
23/11/2026 27/11/2026	13:00-15:00 13:00-16:00	Skin diseases	Massimo Mascolo and Daniela Russo
30/11/2026 04/12/2026	13:00-15:00 13:00-16:00	Head and Neck pathology	Rosa Maria Di Crescenzo and Elena Vigliar
07/12/2026 11/12/2026	13:00-15:00 13:00-16:00	In-depht lectures	Massimo Mascolo

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	X
only written	
only oral	
project discussion	
other	

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

(*) multiple options are possible

b) Evaluation pattern: