Faculty of Medicine in Rijeka

Curriculum
2026/2027

For course

Pathology

Study program:	**Medical Studies in English (R)** University integrated undergraduate and graduate study
Department:	**Department of General Pathology and Pathological Anatomy**
Course coordinator:	**izv. prof. dr. sc. Babarović Emina, dr. med.**
Year of study:	**3**
ECTS:	**16**
Incentive ECTS:	**0 (0.00%)**
Foreign language:	**Possibility of teaching in a foreign language**

Course information:

Pathology is a mandatory course in the third year of the Integrated Undergraduate and Graduate Study in Medicine and consists of 27 hours of lectures, 81 hours of seminars and 102 hours of practicals; valued 16 ECTS credits. The course is held on the premises of the Department of Pathology, Faculty of Medicine, University of Rijeka, and in an online environment within the "Merlin" e-learning system and Microsoft Teams. Student Carnet password received upon acquiring student status is used for entering in "Merlin" e-learning system.

Course objectives and planned outcome

The aim of the Pathology course is to teach the students of mechanisms of cellular injury and various tissue and organ damage. Further goal is to provide the students with the knowledge of morphological changes in the human body during various diseaseses. The task of the course is to enable students to recognize morphological changes in organs, tissues, and cells by gaining theoretical knowledge in lectures and seminars and by gaining their own experience during practicals through reviewing gross specimens and microscopic slides.

Learning outcomes

I. Cognitive Domain – Knowledge

1. List the etiological factors of cell injury, define the pathogenesis or mechanisms of their action, and classify and describe the types of cell adaptation and injury.

2. Define and describe inflammation, tell the difference between acute and chronic inflammation, and compare them with morphological patterns; define and describe tissue repair and relate different patterns of inflammation with clinical presentation.

3. Define certain hemodynamic disorders, describe their morphological characteristics, and compare them with clinical presentation.

4. Define and describe diseases of the immune system, explain their different morphological characteristics, and relate them to clincal presentation.

5. Define and classify neoplasms, describe the biology of tumor growth, list the epidemiology of neoplasms, enumerate carcinogens, describe carcinogenesis, tumor immunity and define the clinical characteristics of tumors.

6. List and describe genetic diseases, the frequency, and types of the most common chromosomopathies. Give an example of cytogenetic test in prenatal diagnosis. List and describe the most common pediatric diseaseses.

7. Within individual organ systems, define the etiopathogenetic factors that lead to tissue and organ damage, then classify (define) individual diseases, describe the morphological features, and ultimately relate them to the clinical picture.

8. Describe the methods (techniques) of work in pathology laboratories and distinguish between methods and possibilities of their application in diagnostics.

II. Psychomotor domain - skills

1. Recognize and describe the macroscopic changes of individual tissues and organs and based on that, determine which disease is underlying (provide possible differential diagnosis with explanation).

2. Recognize and describe the microscopic findings of individual tissues and cells and based on that, determine which disease is underlying (provide possible differential diagnosis with explanation).

3. Distinguish between individual diseases based on morphological changes of the tissues.

4. Compare gross and microscopic patterns of the most common diseases and recognize the crucial differences

5. Link morphological changes with the clinical presentation of the disease state.

6. To identify specific conditions in which, in addition to routine pathohistological assessment, additional diagnostic methods are required for accurate diagnosis and individual treatment of the patient.

Course content

The pathology course consists of a general and a systemic section. In the general pathology part of the course the students are introduced to the principles, pathophysiologic mechanisms and gross and microscopic changes of the Cell as a Unit of Health and Disease, Inflammation and Repair, Hemodynamic Disorders, Thromboembolism, and Shock, Diseases of the Immune System, Neoplasia, Genetic and Pediatric Diseases, Environmental and Nutritional Diseases and General Pathology of Infectious Diseases.

List of assigned reading:

1. Robbins Basic Pathology 10th Edition Authors: Vinay Kumar Abul K. Abbas and Jon C. Aster Elsevier 2017, ISBN: 9780323353175
2. http://mikromed.uniri.hr: Laboratory for virtual microscopy, Faculty of medicine Rijeka (Virtual pathology and Atlas of Pathology)
3. All teaching materials provided in "Merlin" e-learning system.

List of optional reading:

1. GPS – General Pathology Synopsis (Pathology Self-Assessment question's Handbook)
2. SPS – Systemic Pathology Synopsis (Systemic Pathology Self-assessment question's Handbook).
3. Patologija. I. Damjanov, S. Seiwerth, S. Jukić, M. Nola. Peto, prerađeno i dopunjeno izdanje, Medicinska naklada, Zagreb 2018.
4. Patologija. S. Seiwerth, B. Krušlin, M. Kos, D. Galešić Ljubanović. Šesto , prerađeno i dopunjeno izdanje, Medicinska naklada, Zagreb 2023.
5. Atlas of the museum of the Department of Pathology. S. Štifter. University of Rijeka, Faculty of medicine Rijeka, Rijeka 2020.
6. Obdukcijska dijagnostika, M. Belicza i D. Tomas. Medicinska naklada, Zagreb 2012.

Curriculum:

Lectures list (with titles and explanation):

L1. The Pathology – introduction to the course

1. To introduce students to the pathology course.

2. To introduce students with the forms of teaching that are conducted at our department, explain their obligations and the method of examination and evaluation of their knowledge.

3. Brief overview and familiarization of students with the work of a clinical pathologist.

L2. Overview of inflammation: Definition and general features

1. Define inflammation.

2. List the causes of inflammation.

3. Classify inflammation.

4. List and explain the components of the inflammatory reaction.

5. List and explain vascular and cellular changes in acute inflammation.

L3. Chronic Inflammation

1. Define and classify chronic inflammation.

2. List the causes of chronic inflammation.

3. List and explain the cells and mediators of chronic inflammation.

4. Explain the pathogenesis of chronic inflammation.

5. Describe morphologic features of chronic inflammation.

L4. Hemodynamic disorders

1. Define edema, describe, and explain the mechanisms of edema formation and its clinical features.

2. Define hyperemia and congestion and explain pathogenesis.

3. Define thrombosis.

4. Be able to list the predisposing factors for the formation of thrombus, to list the different types of thrombi and their morphology.

5. Indicate and explain the fate of the thrombus and indicate possible clinical consequences.

6. Define an infarct, to classify infarcts, explain the etiopathogenesis, pathohistological and clinical features.

7. Define, classify, and explain different stages of shock. List and describe morphological and clinical features.

L5. Diseases of the Immune System

1. List, define and describe autoimmune diseases with examples of hypersensitivity reactions.

2. Explain the mechanism of rejection of transplants.

3. Define and classify amyloidosis, describe, and explain pathogenesis of amyloid deposition.

L6. Neoplasia part 1 Nomenclature, Characteristics of benign and malignant neoplasms, epidemiology, Clinical aspects of neoplasms

1. Define the term of neoplasms and histogenic classification of neoplasms

2. Describe the principles of nomenclature and classification of neoplasms based on macroscopic and histopathological structure.

3. Describe the typical features of benign and malignant neoplasms.

4. Describe growth patterns and types of tumor metastasis.

5. Explain the principles on which the clinical and histological grading of neoplasms is based.

L7. Neoplasia part 2 Carcinogenesis: A multistep process. Etiology of cancer – Carcinogenic agents

1. Describe carcinogenesis as a multistep process.

2. Identify substances that can have a carcinogenic effect (chemical, physical, biological).

3. Identify viruses associated with carcinogenesis.

4. Analyze Viral Carcinogenesis Mechanisms on Human Papilloma Virus (HPV) Example.

5. Explain the role of oncogenes in carcinogenesis.

6. Describe the role of tumor suppressor genes in carcinogenesis.

7. Describe the role of repair genes in the formation of neoplasms.

L8. General pathology of infectious diseases

1. List and describe general principles of microbial pathogenesis.

2. Describe techniques for identifying infectious agents.

3. Explain routes of transmission and dissemination of microbes.

4. Explain and describe how microbes cause diseases with morphological patterns and tissue responses to microbes.

L9. Skin

1. List and define main macroscopic and microscopic skin lesions.

2. Define, explain pathogenesis, and classify acute inflammatory dermatoses.

3. Describe main morphologic features of acute inflammatory dermatoses.

4.Define, explain pathogenesis, and classify chronic inflammatory dermatoses.

5. Describe main morphologic features of chronic inflammatory dermatoses.

6. Describe infectious dermatoses.

7. List blistering (bullous) skin disorders.

8. List and describe tumors of the skin.

L10. Pathology of Oral cavities and gastrointestinal tract

1. Classify and define oral cavity diseases – inflammatory lesions, proliferative and neoplastic lesions and disesases of the salivary glands.

2. Classify and define diseases of the esophagus - developmental disorders, obstructive lesions and motor obstructions, inflammations, and tumors.

3.Classify and define stomach diseases - developmental disorders, inflammation (acute and chronic gastritis), chronic peptic ulcer and tumors.

L11. Pathology of the liver and gallbladder

1. List and descibre general features of liver diseases and clinical evaluation of liver diseases.

2. Define cirrhosis and list the causes of cirrhosis.

3. List and describe vascular liver diseases.

L12. Pathology of the pancreas

1. Classify and define diseases of the pancreas – congenital disorders, inflammations, and tumors.

L13. Pathology of the endocrine system

1.Classify thyroid tumors.

2.Describe the clinical and pathohistological characteristics of benign and malignant thyroid tumors.

L14. The female genital system

1.Describe the characteristics of the HPV virus and HPV infection.

2.Describe the etiology, risk factors and pathogenesis of cervical intraepithelial neoplasm.

3.Describe and explain the morphology and classification of cervical intraepithelial neoplasm, compare the old and new classification (CIN and SIL).

4.List the risk factors, classification, and clinical presentation of invasive cervical cancer.

L15. Pathology of the blood vessels

1. Define and classify vasculitis, list the causes, and explain the pathogenesis of vasculitis.

2. To describe the characteristic morphological changes of giant cell (temporal) arteritis, Takayasu's arteritis, polyarteritis nodosa, hypersensitivity vasculitis and obliterating thrombangitis, with the indication of complications and the correlation with the clinical presentation.

3. Define and classify ANCA positive vasculitis and describe their morphological and clinical characteristics.

4. Define Kawasaki's and Raynaud's disease and describe their morphological and clinical characteristics.

L16. Pathology of the heart part 1 (Heart failure and ischemic heart disease)

1. Define and clinically classify heart failure, list the causes, and explain the pathogenesis of heart failure, describe macroscopic and microscopic organ changes during heart failure and their connection with the clinical picture.

2. Define and classify ischemic heart disease, list epidemiological data, risk factors and causes of ischemic heart disease.

L17. Pathology of the heart part 2 (Hypertensive heart disease, valvular heart disease, endocarditis)

1. Define and classify hypertensive heart disease, list the causes, morphological characteristics, and complications of systemic hypertensive heart disease, and relate them to the clinical picture.

2. List the causes, morphological characteristics and complications of pulmonary heart disease and relate them to the clinical picture.

3. State the etiological and pathophysiological classification of valve disease, their complications, and association with the clinical picture.

4. Define and classify endocarditis, list epidemiological data, risk factors, causes and explain pathogenesis, describe macroscopic and microscopic changes, list complications and their association with the clinical picture.

L18. Pathology of the kidney and its collecting system

1. Define and classify glomerular and tubulointerstitial kidney diseases, understand and describe their pathogenesis and morphological characteristics.

2. List and describe the main clinical features of glomerular and tubulointerstitial kidney diseases.

3. Describe and explain the clinical importance of kidney biopsy in the treatment of nephrological patients.

L19. Pathology of the lung part 1 (Atelectasis, ARDS, Obstructive and restrictive lung diseases)

1. Define atelectasis and list the types and characteristics of atelectasis.

2. Define and describe morphological characteristics of acute respiratory distress syndrome.

3. Define obstructive lung diseases and their main causes.

4. Define restrictive lung diseases and state the causes.

L20. Pathology of the lung part 2 (Lung tumors)

1. Define and classify lung tumors, provide epidemiological data, causes, explain the pathogenesis of the diseases.

2. Describe the gross and microscopic morphological features of the four major histologic types of lung cancer and relate morphology with the clinical presentation of the disease.

3. Describe and classify pleural lesions.

4. Describe and classify tumors of the upper respiratory tract.

L21. Breast pathology

1.List and describe risk factors for breast cancer.

2.Classify breast cancer and describe the types of non-invasive and invasive breast cancer.

3.List and describe the traditional morphological, predictive, prognostic factors of breast cancer.

4.List and describe the molecular prognostic and predictive factors of breast cancer.

5.List and describe breast stromal neoplasms.

L22. Male genital system and lower urinary tract

1.Define and describe benign prostatic hyperplasia, list epidemiological data, known causes, and describe and recognize the macroscopic and microscopic characteristics of benign prostatic hyperplasia, explain the connection between the initial localization of the disease within the gland and the clinical presentation and symptoms, list the complications.

2.Define prostate cancer, state epidemiological data, causes, and describe and recognize the macroscopic and microscopic characteristics of prostate cancer, explain the connection between the initial location of the cancer within the gland and the clinical presentation.

L23. Pathology of the bones, joints and soft tissue

1. Define bone diseases.

2. Compare primary and secondary bone neoplasms.

3. Define primary bone neoplasms.

4. State the characteristics of neoplasms regarding the patient's age, localization and radiological appearance of the tumor.

5. Describe the basic morphological characteristics of certain forms of bone neoplasms.

L24. Central nervous system

1. Define and classify cerebral edema, hydrocephalus and herniation list the causes, morphological characteristics, and possible complications.

2. Define and classify cerebrovascular diseases, list the causes, morphological characteristics, and complications.

3. Define, describe, and classify infections of the nervous syste; state epidemiological data, causes, and describe and recognize the macroscopic and microscopic characteristics.

L25. Pathology of hematopoietic and lymphoid system

1. Define malignant diseases of white blood cells.

2. Describe methods in the diagnosis of neoplasms of white blood cells.

3. Compare myeloproliferative neoplasms.

4. Define and state the differences between non-Hodgkin's lymphomas and Hodgkin's lymphomas.

L26. Autopsy

1. Define external signs of death.

2. Describe the process of examination of the deceased and autopsy.

3. List the most common causes of death.

4. Define the types and role of autopsy.

L27. Molecular pathology

1. Explain the importance of molecular diagnostics in pathology.

2. Define and explain the mechanisms of molecular-biological methods used in everyday clinical practice.

3. Give examples and explain the use of molecular-biological methods in everyday clinical practice.

Seminars list (with titles and explanation):

S1. Cell Injury, Cell death and cellular adaptations

1. List the causes of cell damage.
2. State and describe the forms of cellular adaptation - atrophy, hypertrophy, hyperplasia, metaplasia, and dysplasia.
3. Define the role of apoptosis in physiological and pathological conditions.
4. Morphologically classify forms of cell damage (reversible and irreversible).
5. Describe and explain the mechanisms of acute and chronic reversible damage.
6. Define irreversible cell damage from apoptosis, necrosis, calcification, senescence, and death.

S2. Acute inflammation, Morphologic patterns of acute inflammation and outcomes

1. Define and classify inflammation.
2. List and explain the etiological factors of inflammation.
3. List the components of the inflammatory process, especially cells, explain the role of blood vessels and surrounding tissue.
4. Classify mediators, i.e. chemical mediators of inflammation.
5. Describe the vascular and cellular phases of inflammation.
6. Explain the difference between exudate and transudate.
7. List and explain local and systemic signs of inflammation.
8. List, define and describe morphologic patterns of acute inflammation.

S3. Chronic inflammation and tissue repair

1. State and explain the outcomes of acute inflammation (healing, resolution, regeneration, reparation, persistence, and relapse).
2. Differentiate between the terms labile, stable and permanent cells.
3. List and explain the steps in the formation of a scar.
4. Define and explain the terms: granulation tissue, scar, and fibrosis.
5. Explain the difference between healing by first intention and healing by second intention.
6. State and explain the complications of wound healing.
7. Define and classify chronic inflammation, explain pathogenesis.
8. Define granulomatous inflammation and list and describe its morphological forms.

S4. Hemodynamic disorders

1. Define edema, describe, and explain the mechanisms of edema formation and its clinical features.
2. Define hyperemia and congestion and explain pathogenesis.
3. Define thrombosis.
4. Be able to list the predisposing factors for the formation of thrombus, to list the different types of thrombi and their morphology.
5. Indicate and explain the fate of the thrombus and indicate possible clinical consequences.
6. Define the term disseminated intravascular coagulation (DIC), list the clinical disorders associated with DIC, explain the mechanisms of occurrence, pathohistological and clinical features.
7. Define embolism, explain the etiopathogenesis and morphological features of individual embolus, and state the clinical correlation.
8. Define an infarct, to classify infarcts, explain the etiopathogenesis, pathohistological and clinical features.
9. Define, classify, and explain different stages of shock. List and describe morphological and clinical features.

S5. Autoimmune diseasses, rejection to transplants and amyloidosis seminar with 3 virtual slides (http://mikromed.uniri.hr/ostalo.html)

1. List hypersensitivity reactions, give examples.
2. Explain the mechanism of transplantation reaction.
3. Classify immunodeficiency conditions.

Define autoimmune diseases and list the most important features of systemic lupus erythematosus, Sjögren's syndrome, systemic sclerosis, and rheumatoid arthritis.
5. Explain the mechanism of acquired immunodeficiency syndrome, describe the morphological changes in individual organ systems and the clinical features.
6. Define, classify, and describe amyloidosis.

S6. Neoplasia part 1 Nomenclature, Characteristics of benign and malignant neoplasms, epidemiology, Clinical aspects of neoplasms

1. Describe and explain the typical characteristics of benign and malignant neoplasms.
2. Describe the principles of nomenclature and classification of neoplasms based on macroscopic and histological images.
3. Describe the patterns of growth and spread of neoplasms.
4. Explain the principles on which the clinical grading of neoplasms is based.
5. Differentiate the degree and stage of the disease.

S7. Neoplasia part 2 (Etiology of cancer: carcinogenic agents)

1. Describe carcinogenesis as a multistep process.
2. Identify substances that can have a carcinogenic effect (chemical, physical, biological).
3. Identify viruses associated with carcinogenesis.
4. Analyze Viral Carcinogenesis Mechanisms on Human Papilloma Virus (HPV) Example.
5. Explain the role of oncogenes in carcinogenesis.
6. Describe the role of tumor suppressor genes in carcinogenesis.
7. Describe the role of repair genes in the formation of neoplasms.

S8. General pathology of Infectious diseases

1. List and describe general principles of microbial pathogenesis.
2. Describe techniques for identifying infectious agents.
3. Explain routes of transmission and dissemination of microbes.
4. Explain and describe how microbes cause diseases with morphological patterns and tissue responses to microbes.
5. Explain and describe immune evasion by microbes.
6. Explain and describe the spectrum of inflammatory responses to infection.

S9. Skin pathology (acute and inflammatory dermatoses, infectious dermatoses, blistering disorders and tumors)

1. Define, explain pathogenesis, and classify acute inflammatory dermatoses.
2. Describe main morphologic features of acute inflammatory dermatoses.
3. Define, explain pathogenesis, and classify chronic inflammatory dermatoses.
4. Describe main morphologic features of chronic inflammatory dermatoses.
5. Describe main morphologic features of infectious dermatoses.
6. List and describe blistering (bullous) skin disorders.
7. Describe the morphological characteristics of benign and malignant epithelial tumors of the skin.
8. List and describe the main morphological characteristics of pigmented skin lesions.
9. Classify pigment lesions and differentiate them from potentially malignant pigment tumors.
10. List metastatic tumors in the skin.

S10. Pathology of Oral cavities and gastrointestinal tract

1. Classify and describe diseases of the stomach.
2. Define and classify chronic gastritis, list the causes of the disease, describe, and identify macroscopic and microscopic morphological characteristics of chronic gastritis, explain the complications.
3. Classify and describe gastric polyps and gastric tumors.
4. Classify and describe diseases of the small and large intestines - developmental and genetic disorders, vascular intestinal diseases, diverticula and obstructions, inflammatory bowel diseases and neoplasms.
5. Define acute appendicitis and list epidemiological characteristics, clinical presentation and differential diagnosis, describe the morphological characteristics acute appendicitis.
6. Define and classify tumors of appendix.

S11. Pathology of the liver and gallbladder

1. Define and classify viral hepatitis.
2. List toxic liver damage (alcoholic liver disease, drug-induced liver damage).
3. List, classify and distinguish immune liver diseases - primary biliary cirrhosis, primary sclerosing cholangitis,

autoimmune hepatitis, primary biliary cirrhosis)
4. List and describe metabolic diseases of the liver.
5. List the types of focal lesions of the liver.
6. Enumerate, classify, and describe tumors and related lesions of the liver.
7. List and describe diseases of the gallbladder and bile ducts (stones, inflammations, tumors).

S12. Endocrine pancreas (Diabetes mellitus and pancreatic neuroendocrine tumors)

1. Define and classify diabetes mellitus, list the causes of the disease, and describe pathogenesis.
2. List and explain acute metabolic complications of diabetes.
3. List and describe chronic complications of diabetes, explain pathogenesis, describe the most important morphologic changes related to the late complications of diabetes.
4. Define and classify pancreatic neuroendocrine tumors.

S13. Pathology of the endocrine system

1. Enumerate and describe disorders of the function of the endocrine glands - pituitary gland, thyroid gland, parathyroid gland, adrenal gland.
2. Enumerate and describe disorders of thyroid gland development and their clinical significance.
3. List and explain the causes and clinical features of thyrotoxicosis, hyperthyroidism, and hypothyroidism.
4. Explain goitre and describe the morphological characteristics.
5. List and describe thyroiditis.
6. Enumerate and describe tumors of the cortex and medulla of the adrenal gland and their clinical features.
7. Explain multiple endocrine neoplasia syndromes (MEN).

S14. Pathology of female genital system

1. List and describe inflammatory diseases of the female reproductive system.
2. List, define, and describe neoplasms of the vulva and vagina.
3. Define and describe the main morphological features of endometriosis.
4. List and describe causes of abnormal uterine bleeding.
5. List, classify, and describe endometrial preneoplastic changes and endometrial cancer.
6. Classify and describe mesenchymal tumors of the uterine body.
7. List, classify, and describe ovarian and fallopian tube neoplasms.
8. Name and describe gestational trophoblastic diseases.

S15. Pathology of the blood vessels seminar with 2 virtual slides (http://mikromed.uniri.hr/srce%20i%20kz.html)

1. Define, classify, and describe arteriosclerosis and atherosclerosis.
2. Define medial sclerosis, arteriolosclerosis and fibromuscular intimal hyperplasia and describe their microscopic morphological characteristics.
3. Define, classify, and describe aneurysms and dissections.
4. Define varicosities, phlebothrombosis and thrombophlebitis.
5. Define and classify lymphedema and lymphangitis.
6. Define and classify blood vessel tumors.
7. State and describe the pathological changes that occur due to therapeutic procedures in blood vessel diseases.

S16. Pathology of the heart part 1 (heart failure, congenital heart diseases and ischemic heart disease)

1. Define and classify heart failure, list the causes, and explain the pathogenesis of heart failure, describe the morphological changes of organs in heart failure, and relate them to the clinical picture of heart failure.
2. Define and classify congenital heart defects, list epidemiological data and known causes, risk factors, describe the morphological characteristics of congenital heart defects, and relate them to the clinical picture.
3. Define and classify ischemic heart disease, provide epidemiological information and known causes and risk factors for ischemic heart disease.
4. Define and classify angina pectoris, list the causes, and describe the morphological and clinical characteristics of angina.
5. Define and classify myocardial infarction, list the causes of myocardial infarction, describe, and identify macroscopic and microscopic morphological characteristics of myocardial infarction, explain the association of coronary thrombosis site and infarct localization, describe, identify, and explain the complications of infarction and clinical picture.
6. Define chronic ischemic heart disease and sudden cardiac death and list their epidemiological characteristics, causes and clinical picture, describe the morphological characteristics of chronic ischemic heart disease.
7. Define rheumatic fever and rheumatic heart disease, list epidemiological data, causes and explain pathogenesis, describe their morphological macroscopic and microscopic changes, state complications and their

correlation with the clinical picture.

S17. Pathology of the heart part 2 (hypertensive heart disease, valvular heart disease, cardyomyopathies and myocarditis pericardial disease)

1. Define and classify hypertensive heart disease, list the causes, morphological characteristics and
2. complications of systemic hypertensive heart disease and relate them to the clinical picture.
3. List the causes, morphological characteristics, and complications of pulmonary heart disease and

   relate them with the clinical presentation.

1. State the etiological and pathophysiological classification of valve disease, their complications, and association with the clinical presentation.
2. Define aortic aortic stenosis, mitral stenosis, and mitral valve prolapse, indicate their epidemiological characteristics, explain pathogenesis, describe morphological characteristics, and relate them to the clinical presentation.
3. Define and classify endocarditis, list epidemiological data, risk factors, causes and explain pathogenesis, describe macroscopic and microscopic changes, list complications and their association with the clinical picture.
4. Define and classify cardiomyopathies and myocarditis, list the causes, describe the morphological changes and the clinical features of myocarditis and cardiomyopathy.
5. Define and classify pericardial effusions and pericarditis, list causes and describe morphological changes and clinical features of pericardial effusions and pericarditis.
6. Classify heart tumors, provide epidemiological data for heart tumors.

S18. Kidney and its collecting system

1. Define and explain clinical manifestations of renal diseases.
2. Define, classify, and explain the most common developmental disorders of the kidneys and urinary tract.
3. Define, classify, and explain glomerular disease.
4. Define, classify, and explain tubulointerstitial inflammation of the kidneys.
5. Define, classify, and explain cystic diseases of the kidney.
6. Define, classify, and explain diseases involving renal blood vessels.
7. Define and describe urinary outflow obstruction.
8. Classify and describe kidney tumors.

S19. Pathology of the lung part 1 (atelectasis, ARDS, obstructive and restrictive lung diseases, pulmonary diseases of vascular origin)

1. List and describe congenital lung anomalies.
2. Define atelectasis and list the types and characteristics of atelectasis.
3. Define obstructive lung diseases and their main causes.
4. Define restrictive lung diseases and state the causes.
5. Enumerate, define, and describe pulmonary diseases of vascular origin - edema, pulmonary embolism, hemmoraghe and infarction, pulmonary hypertension, diffuse alveolar damage.

S20. Pathology of the lung part 2 (Pulmonary infections and lung tumors)

1. List, define and describe the most important pulmonary infections.

2. State lung diseases of autoimmune origin.

3. Define and classify lung tumors, provide epidemiological data, causes, explain the pathogenesis of the diseases.

4. Describe the gross and microscopic morphological features of the four major histologic types of lung cancer and relate morphology with the clinical presentation of the disease.

5. Describe and classify pleural lesions.

6. Describe and classify inflammation and tumors of the upper respiratory tract.

S21. Breast pathology

1. Explain clinical presentation of breast disease.
2. List and describe breast inflammation (etiology, epidemiology, pathology, and clinical presentation).
3. List and describe benign epithelial lesions of the breast (epidemiology, etiology and pathogenesis, pathology, clinical features).
4. List and describe risk factors for breast cancer.
5. Classify breast cancer and describe the types of non-invasive and invasive breast cancer.

List and describe the traditional morphological, predictive, prognostic factors of breast cancer.
7. List and describe the molecular prognostic and predictive factors of breast cancer.
8. List and describe breast stromal neoplasms.
9. Describe gynecomastia and state the most important causes.
10. Describe male breast cancer and its clinical characteristics.

S22. Male genital system and lower urinary tract

1. Define and classify the most common developmental disorders of the male genital organs.
2. Define, classify, and describe inflammatory diseases of the male genital organs.
3. Classify penile tumors, describe, and recognize macroscopic and microscopic characteristics, explain the clinical features.
4. Define and classify circulatory disorders of the male genital organs.
5. Classify testicular tumors, describe, and recognize macroscopic and microscopic characteristics, explain the clinical features.
6. Enumerate and describe inflammatory disorders of the urethra and urinary bladder.
7. Define and classify urinary bladder neoplasms, provide epidemiological information and known causes and risk factors for this disease.
8. Describe the morphological and clinical characteristics of urinary bladder neoplasms.

S23. Bones, joints and soft tissue

1. List and describe congenital disorders of bone and cartilage.
2. List and describe metabolic disorders of the bone
3. Explain the etiology and pathogenesis and describe the pathology and clinical features of osteonecrosis.
4. State the etiology and pathology and describe the pathology and clinical presentation of osteomyelitis.
5. State the etiology of bone fractures and describe their pathogenesis and clinical presentation.
6. Classify bone tumors and tumor like lesions, indicate their epidemiology and etiology, morphology, and describe the clinical presentation.
7. Describe inflammatory and degenerative joint diseases.
8. Define crystal deposition diseases in the joints.
9. List and describe tumors and tumor-like changes that occur in the joints.
10. Define the term soft tissue tumor. List, classify and describe types of soft tissue tumors.

S24. Central nervous system

1. List and describe the basic pathological changes of the central nervous system.
2. Explain the etiology, pathogenesis, and clinical manifestations of general and local ischemia.
3. To explain the etiology, pathogenesis, and clinical manifestations of intracranial hemorrhage.
4. Define classify and describe neurodegenerative diseases.
5. List and classify CNS tumors, provide epidemiological information and the most important clinical features.
6. Define and describe the basic morphological features of glial and non-glial tumors.
7. Explain their clinical significance in relation to prognostic and predictive diagnostic methods.
8. Define and describe familial tumor syndromes with an increased risk for CNS tumors.

S25. Pathology of hematopoietic and lymphoid system

1. Describe the basic characteristics of peripheral blood, bone marrow and the normal structure of the lymph node and spleen.
2. Define anemia, state epidemiological information, and explain morphological and etiological classification.
3. Name and describe bleeding disorders.
4. Definy classify and describe neoplastic proliferations of white blood cells.
5. Classify non-Hodgkin's lymphomas into neoplasms of mature B and T lymphocytes.
6. To describe the most common indolent lymphomas of mature B cells.
7. Describe the most common aggressive lymphomas of mature B cells.
8. Describe plasma cell neoplasms and similar diseases.
9. State the basic characteristics of T lymphocyte lymphoma and describe the most common forms.
10. Describe the basic characteristics of Hodgkin's lymphoma and classify it.
11. State the basic characteristics of nodular lymphocytic predominance of Hodgkin's lymphoma.
12. State the basic characteristics of individual forms of classic Hodgkin's lymphoma: nodular sclerosis, mixed cellularity, lymphocyte depletion and lymphocyte-rich.
13. Describe neoplasms of histiocytes and dendritic cells.

S26. Diagnostic techniques in pathology

1. List and describe types of tissue samples.

Define the term intraoperative biopsy.
3. List and describe the work protocol in the pathohistology laboratory.
4. List the types of laboratories used in pathology work, with their specificities.

S27. Molecular pathology

1. Explain the importance of molecular diagnostics in pathology.
2. Define and explain the mechanisms of PCR, reverse transcription PCR, real time PCR.
3. Explain the difference between PCR, reverse transcription PCR and real time PCR.
4. Define in situ hybridization and why it is used.
5. Define sequencing and why it is used.
6. Enumerate and give examples of solid tumors in which molecular diagnostics is an indispensable part of the modern clinical treatment of patients and explain why.
7. Enumerate the molecular-biological methods used in pathological diagnosis.
8. Give examples and explain the use of molecular-biological methods for the purpose of confirming the diagnosis.
9. Give examples and explain the use of molecular-biological methods in assessing the prognosis and biological behavior of neoplasms.
10. List the applications and explain the use of molecular-biological methods in the assessment of minimal residual disease.
11. List applications and explain the use of molecular-biological methods in determining hereditary predisposition to malignant neoplasms.
12. List applications and explain the use of molecular-biological methods in determining predictive markers and response to therapy.

Practicals list (with titles and explanation):

P1. Cellular pathology

Atrophia cyanotica hepatis

Hypertrophia myocardii

Hyperplasia glandularis prostatae

Metaplasia squamosa

Metamorphosis adiposa hepatis

Anthracosis pulmonis

Haemochromatosis

Infarctus myocardii recens

Encephalomalatia

Tuberculosis caseosa pulmonis

Microcalcificationes placentae

Infarctus anaemicus placentae

Steatonecrosis

P2. Inflammation

Pericarditis fibrinosa

Pneumonia abcedens et pleuritis fibrinosa

Appendicitis suppurativa phlegmonosa

Granulationes

Sialoadenitis chronica suppurativa

Sarcoidosis lymphonodi

Granuloma corporis alieni

Lymphadenitis granulomatosa – cat-scratch disease

P3. Hemodynamic disorders 1

Cyanosis et oedema pulmonum

Induratio cyanotica pulmonum

Necrosis haemorrhagica centralis hepatis

P4. Hemodynamic disorders 2

Thromboembolia arteriae pulmonalis cum infarctus haemorrhagicus pulmonis

Embolia adiposa pulmonis

Infarctus anaemicus renis

P5. Genetic and pediatric diseases + Environmental and Nutritional diseases – Student seminar

Student seminar:

Students will be divided into work groups and should choose 1 of the 4 assigned topics to cover:

Topic 1 – Genetic diseases

Topic 2 – Pediatric diseases

Topic 3 - Environmental diseases (Toxicity, environmental pollution, effects of tobacco, alcohol and drugs, injury by physical agents)

Topic 4 - Nutritional diseases.

The topic is presented in an exercise with a .ppt, where all students of the group participate in the preparation, and one of them presents orally.

P6. Neoplasms I

Papilloma

Cystadenoma serosum ovarii

Teratoma

Adenoma pleomorphe

Desmoplastic cancer (carcinoma scirrhosum)

Carcinoma anaplasticum

Adenocarcinoma

P7. Neoplasms II

Leiomyoma

Leiomyosarcoma

Morbus Bowen

Adenocarcinoma metastaticum lymphonodi

Adenocarcinoma metastaticum hepatis

Lymphangiosis carcinomatosa

P8. Immunopathology

Amyloidosis renis

Amyloidosis hepatis

Tophi urici

Pneumonia necrotisans et granulomata corporis alieni

Asbestosis et anthracosis pulmonis

General pathology slides overview

P9. Skin

Keratosis seborrhoica

Carcinoma planocellulare corneum

Pilomatrixoma

Naevus compositus

Melanoma malignum

P10. Digestive system

Ulcus ventriculi chronicum

Carcinoma ventriculi (intestinal type)

Carcinoma ventriculi (diffuse type)

Gastritis chronica

Morbus Crohn

Adenocarcinoma colonis

Adenoma tubulovillosum colonis

Carcinoides colonis (NET grade 1)

P11. Liver

Hepatitis chronica

Cirrhosis hepatis

Carcinoma hepatocellulare

Cholecystitis chronica

Adenocarcinoma vesicae felleae

Echinococcus hepatis

P12. Pancreas

Pancreatitis chronica

Adenocarcinoma pancreatis

P13. Endocrine

Struma colloides glandulae thyreoideae

Carcinoma papillare glandulae thyreoideae

Carcinoma folliculare glandulae thyreoideae

Carcinoma medullare glandulae thyreoideae

Carcinoma anaplasticum glandulae thyroideae

Pheochromocytoma

P14. On-line exercise overview of the teaching material completed so far and preparation for the oral exam.

...

P15. The female sex system

CIN 3 (cervical intraepithelial neoplasia 3)

Hyperplasia simplex endometrii

Adenocarcinoma endometrii

Adenomyosis

Endometriosis intestini crassi

P16. On-line exercise overview of the teaching material completed so far and preparation for the oral exam.

...

P17. The female sex system

Tumor serosum atypicum proliferans ovarii

Adenocarcinoma serosum ovarii

Carcinoma metastaticum ovarii

Graviditas tubaria

Mola hydatidosa completa

P18. On-line exercise overview of the teaching material completed so far and preparation for the oral exam.

...

P19. Blood vessels

Atherosclerosis

Polyarteritis nodosa

P20. On-line exercise overview of the teaching material completed so far and preparation for the oral exam.

...

P21. Kidney

Glomerulonephritis mesangioproliferativa

Glomerulonephritis membranosa

Glomerulonephritis chronica sclerotisans (terminalis)

Glomerulosclerosis nodularis diabetica

P22. On-line exercise overview of the teaching material completed so far and preparation for the oral exam.

...

P23. Kidney

Pyelonephritis chronica

Carcinoma renis (clear cell)

Carcinoma transitiocellulare papillare vesicae urinariae low grade

Neinvazivna papilarna neoplazma niskog malignog potencijala mokraćnog mjehura

Carcinoma transitiocellulare nonpapillare visokog stupnja - pT2

P24. On-line exercise overview of the teaching material completed so far and preparation for the oral exam.

…

P25. Respiratory system

Cyanosis et oedema pulmonum

Thromboembolia arteriae pulmonalis cum infarctus haemorrhagicus pulmonis

Membranae hyalinae pulmonum

Bronchiectasiae et bronchitis chronica suppurativa

Bronchopneumonia

Tuberculosis miliaris pulmonis

Aspergillosis pulmonis

P26. On-line exercise overview of the teaching material completed so far and preparation for the oral exam.

…

P27. Respiratory system

Carcinoma planocellulare bronchi

Carcinoma microcellulare bronchi

Adenocarcinoma pulmonis

P28. Breast

Mastitis

Mastopathia fibrosa cystica

Fibroadenoma

Carcinoma ductale invasivum mammae

Carcinoma lobulare invasivum mammae

Carcinoma medullare mammae

Morbus Paget mammae

P29. The male genital system

Hyperplasia glandularis prostatae

Adenocarcinoma prostatae

Orchitis chronica suppurativa

Seminoma

Mixed germ cell tumor of the testis (embryonal and choricarcinoma)

Mixed germ cell tumor of the testis (seminoma and embryonal) karcinom

P30. Bone system, joints and soft tissues

Osteochondroma

Tumor gigantocellularis

Chondrosarcoma

Leiomyosarcoma

P31. Central nervous system

SDH (haematoma subdurale)

Haematoma intracerebrale

Abscessus cerebri et vasculitis

Abscessus metastatici cerebri

Encephalitis

Aspergillosis cerebri

Pyocephalus

Leptomeningitis acuta suppurativa

Lymphoma cerebri

Oligodendroglioma

Glioblastoma

Meningeoma

Neurinoma

Ganglioneuroma

Neurofibroma

Angioma

P32.Hematopoietic and lympoid system

Leukaemia lymphatica hepatis

Leukaemia myeloica chronica

Myeloma multiplex

Lymphadenitis follicularis

Lymphoma non-Hodgkin (follicular lymphoma)

Lymphoma non-Hodgkin (DLBCL)

Lymphoma Hodgkin (mixed cellularity)

Lymphoma Hodgkin (nodular sclerosis)

P33. Cytology

Acute myeloid leukemia - bone marrow punctate

High-grade lymphoma - FNA

Hodgkin's lymphoma - FNA

Metastatic melanoma - FNA

Papillary thyroid carcinoma - FNA

Breast fibroadenoma - FNA

Breast cancer - FNA

Pleomorphic salivary gland adenoma - FNA

Pancreatic cancer - FNA

Non-small cell lung cancer - bronchoscopic sample

Small cell lung cancer - bronchoscopic sample

High-grade urothelial carcinoma - urine

Mesothelioma - pleural effusion

High-grade serous carcinoma - ascites

Low-grade squamous intraepithelial lesions - cervical cytology (Pap test)

High-grade squamous intraepithelial lesions - cervical cytology (Pap test)

P34. Autopsy with clinico pathological correlation

...

Student obligations:

All forms of teaching are mandatory and student attendance at lectures, seminars and exercises will be conducted accordingly. Student has not fulfilled his / her obligations prescribed by the study program if he / she did not attend more than 30% of teaching hours of all forms of teaching (lectures, seminars or exercises) according to the Rulebook on Student Assessment at the Faculty of Medicine in Rijeka, class: 003-05/18-02/07, reg 2170-24-01-18-1.

Exam (exam taking, description of the written/oral/practical part of the exam, point distribution, grading criteria):

Students' performance will be evaluated during class and at the final exam. Out of a total of 100% of marks, during the class the student can achieve a maximum of 70% of marks, and at the final exam a maximum of 30% of marks.

I. Achievement during the class (maximum 70% of marks):

Students' knowledge will be continuously monitored and graded during the course, as well as upon completion of certain units in the form of two written checks (tests: part I and part II) and one student seminar.

A. Acquired knowledge with two written examinations (maximum 66% of marks) as follows in the tables:

Part I	
Correct Answers Points	**Points**
58 – 60	23
56 – 57	22,5
54 – 55	22
52 – 53	21
50 – 51	20
47 – 49	19
44 – 46	18
42 – 43	17
40 – 41	16
38 – 39	15
36 - 37	14

Part II	
Correct Answers Points	**Points**
120	43
119	42,5
118	42
116 – 117	41
114 – 115	40
112 – 113	39
110 – 111	38
108 – 109	37
106 – 107	36
104 – 105	35
102 – 103	34
100 – 101	33
97 – 99	32
94 – 96	31
91 – 93	30
89 – 90	29
87 – 88	28

85 – 86	27
83 – 84	26
81 – 82	25
79 – 80	24
77 – 78	23
75 – 76	22
74	21
73	20,5
72	20

Tests in general pathology (60 questions), part I, can achieve a maximum of overall 23% of assessment points, and test in systemic pathology (120 questions), part II, a maximum of 43% of assessment points.

Part I includes teaching content: L1 – L8, S1 – S8 and E1- E8, it will take place 30/11/2026.

Remedial test, part I: 27/01/2027.

Part II includes teaching content: L9 – L27, S9 – S27 and E9 – E34, it will take place 28/5/2027.

Remedial test, part II: 10/6/2027.

Additional remedial test, part I or II: 24/6/2027.

B. Student seminar, with a maximum score of 4%, ie a minimum of 1% according to the table:

Rating Points	**Points**
5	**4**
4	**3**
3	**2**
2	**1**

The grade is determined according to the student grading rule based on final success.

In addition to regular proficiency tests, remedial tests will be organized for each test (part I and part II) for those students who have failed to earn points (insufficient academic achievement or failure to attend the exam for justified reasons) and students who want to improve the number of points gained by passing regular partial courses, in which case the number of points earned on the remedial will be counted as the final result.

Students will have the option of additional written correction

II. Final exam in Pathology (maximum 30% of marks):

Only students who have fulfilled the following requirements can take the final exam:

1. have duly completed the course

2. have achieved a **minimum of 35% mark**, ie 50% or more mark, out of the maximum 70% mark that could be obtained during the course through continuous monitoring and evaluation of students.

Students who have earned a total of 0 to 49.9% of grades during the course of all forms of knowledge assessment, which could be obtained during the course through continuous monitoring and evaluation of students, are graded F (unsuccessful), cannot earn ECTS credits and must re-enroll in the course.

The final exam is conducted in oral form and includes the examination of theoretical knowledge in general and systemic pathology and the recognition of micro and macro preparations.

Oral exam is divided into 3 parts:

1st theoretical part: 2 questions general pathology and 3 questions from systemic pathology - the student must answer all 5 questions for sufficient grade (definition, classification and basics).

2nd part virtual microscopy - slides - the same principle - 2 slides from general pathology and 3 slides from systemic. Once again student need to know all 5 slides at least for grade 2 (sufficient), to be able to go further.

3rd atlas specimens: 2 images from general pathology and 3 images from systemic - same principle, all 5 images should be recognized, and student should know the theory behind that at least for grade 2 (sufficient).

Each of the three parts of the final exam (theory, macro, micro) can achieve a minimum of 5 to a maximum of 10 points.

Exam score	Points
4,6 – 5,0	**10**
4,1 – 4,5	**9**
3,6 – 4,0	**8**
3,1 – 3,5	**7**
2,5 – 3,0	**6**
2,0 – 2,4	**5**

Students who do not pass the final oral exam must re-enroll in the pathology course, and if they have achieved a total of 50 or more points, they do not have to re-take the entire pathology course (attendance at lectures, seminars and exercises is not mandatory), but it is recommended that they do so. The points they collected in the written exams and the seminar are not transferred to the new academic year. This means that students that re-enroll in pathology course will have to take both written exams in order to earn points for the oral exam.

The final grade from the course is determined on the basis of the final success according to the table:

Total points	Final grade
90 - 100% (A)	**Excellent (5)**
75 - 89,9 % (B)	**Very good (4)**
60 - 74,9% (C)	**Good (3)**

50 - 59,9% (D)	**Sufficient (2)**

Other notes (related to the course) important for students:

The course contents and all course related information are available on the student web portals, Departments of General Pathology and Pathological Anatomy and Merlin 2026/2027: Prijava u sustav | Merlin 26/27 .

COURSE HOURS 2026/2027

Pathology

Lectures (Place and time or group)	**Practicals** (Place and time or group)	**Seminars** (Place and time or group)
05.10.2026		
L1. The Pathology – introduction to the course: • Pathology - Exercise room (12:15 - 13:00) [162] ○ Pathology		
izv. prof. dr. sc. Fučkar Čupić Dora, dr. med. [162]		
07.10.2026		
		S1. Cell Injury, Cell death and cellular adaptations: • P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [162] ○ S_1 • Pathology - Exercise room (11:15 - 14:00) [506] ○ S_2
izv. prof. dr. sc. Babarović Emina, dr. med. [506] · izv. prof. dr. sc. Fučkar Čupić Dora, dr. med. [162]		
09.10.2026		
	P1. Cellular pathology: • P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [162] ○ P_1 • Pathology - Exercise room (11:15 - 14:00) [506] ○ P_2	
izv. prof. dr. sc. Babarović Emina, dr. med. [506] · izv. prof. dr. sc. Fučkar Čupić Dora, dr. med. [162]		
12.10.2026		
L2. Overview of inflammation: Definition and general features: • Pathology - Exercise room (12:15 - 13:00) [1205] ○ Pathology		
doc. dr. sc. Seili - Bekafigo Irena, dr. med. [1205]		
14.10.2026		
		S2. Acute inflammation, Morphologic patterns of acute inflammation and outcomes: • P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [511] ○ S_1 • Pathology - Exercise room (11:15 - 14:00) [1205] ○ S_2
izv. prof. dr. sc. Matušan Ilijaš Koviljka, dr. med. [511] · doc. dr. sc. Seili - Bekafigo Irena, dr. med. [1205]		
16.10.2026		

	P2. Inflammation:
	• P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [1905]
	  ○ P_1
	• Pathology - Exercise room (11:15 - 14:00) [1907]
	  ○ P_2	

naslovna asistentica Madžar Petra, dr. med. [1905] · naslovna asistentica Murković Martina, dr. med. [1907]		
19.10.2026		
L3. Chronic Inflammation: • Pathology - Exercise room (12:15 - 13:00) [511] ○ Pathology		
izv. prof. dr. sc. Matušan Ilijaš Koviljka, dr. med. [511]		
21.10.2026		

	P3. Hemodynamic disorders 1:
	• P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [1430]
	  ○ P_2
		S3. Chronic inflammation and tissue repair:
		• Pathology - Exercise room (11:15 - 14:00) [506]
		  ○ S_1

izv. prof. dr. sc. Babarović Emina, dr. med. [506] · naslovni asistent Kovač Leo, dr. med. [1430]		
23.10.2026		

	P3. Hemodynamic disorders 1:
	• Pathology - Exercise room (11:15 - 14:00) [1704]
	  ○ P_1
		S3. Chronic inflammation and tissue repair:
		• P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [511]
		  ○ S_2

izv. prof. dr. sc. Matušan Ilijaš Koviljka, dr. med. [511] · naslovna asistentica Savić Vuković Anita, dr. med. [1704]		
26.10.2026		
L4. Hemodynamic disorders: • Pathology - Exercise room (12:15 - 13:00) [503] ○ Pathology		
izv. prof. dr. sc. Hadžisejdić Ita, dr. med. [503]		
28.10.2026		

		S4. Hemodynamic disorders:
		• P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [503]
		  ○ S_1
		• Pathology - Exercise room (11:15 - 14:00) [506]
		  ○ S_2

izv. prof. dr. sc. Babarović Emina, dr. med. [506] · izv. prof. dr. sc. Hadžisejdić Ita, dr. med. [503]		
30.10.2026		

	P4. Hemodynamic disorders 2:
	• P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [1087]
	  ○ P_1
	• Pathology - Exercise room (11:15 - 14:00) [1907]
	  ○ P_2	

naslovna asistentica Holjević Ena, dr. med. [1087] · naslovna asistentica Murković Martina, dr. med. [1907]		
02.11.2026		
L5. Diseases of the Immune System: • Pathology - Exercise room (12:15 - 13:00) [506] ○ Pathology		
izv. prof. dr. sc. Babarović Emina, dr. med. [506]		
04.11.2026		

		S5. Autoimmune diseasses, rejection to transplants and amyloidosis seminar with 3 virtual slides (http://mikromed.uniri.hr/ostalo.html):
		• P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [1715]
		  ○ S_1
		• Pathology - Exercise room (11:15 - 14:00) [506]
		  ○ S_2

izv. prof. dr. sc. Babarović Emina, dr. med. [506] · doc. dr. sc. Štemberger Christophe, dr. med. [1715]		
06.11.2026		

	P5. Genetic and pediatric diseases + Environmental and Nutritional diseases – Student seminar:
	• P14 - PATHOLOGY of lecture halls (13:15 - 16:00) [1704]
	  ○ P_1
	• Pathology - Exercise room (13:15 - 16:00) [506]
	  ○ P_2	

izv. prof. dr. sc. Babarović Emina, dr. med. [506] · naslovna asistentica Savić Vuković Anita, dr. med. [1704]		
09.11.2026		
L6. Neoplasia part 1 Nomenclature, Characteristics of benign and malignant neoplasms, epidemiology, Clinical aspects of neoplasms: • Pathology - Exercise room (12:15 - 13:00) [506] ○ Pathology		
izv. prof. dr. sc. Babarović Emina, dr. med. [506]		
11.11.2026		

		S6. Neoplasia part 1 Nomenclature, Characteristics of benign and malignant neoplasms, epidemiology, Clinical aspects of neoplasms: • P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [506] ◦ S_1 • Pathology - Exercise room (11:15 - 14:00) [503] ◦ S_2
izv. prof. dr. sc. Babarović Emina, dr. med. [506] · izv. prof. dr. sc. Hadžisejdić Ita, dr. med. [503]		
13.11.2026		
	P6. Neoplasms I: • Pathology - Exercise room (13:15 - 16:00) [1087] ◦ P_1 • P14 - PATHOLOGY of lecture halls (13:15 - 16:00) [1430] ◦ P_2	
naslovna asistentica Holjević Ena, dr. med. [1087] · naslovni asistent Kovač Leo, dr. med. [1430]		
16.11.2026		
L7. Neoplasia part 2 Carcinogenesis: A multistep process. Etiology of cancer – Carcinogenic agents: • Pathology - Exercise room (12:15 - 13:00) [1715] ◦ Pathology		S7. Neoplasia part 2 (Etiology of cancer: carcinogenic agents): • Pathology - Exercise room (13:15 - 16:00) [1715] ◦ S_1 • P14 - PATHOLOGY of lecture halls (14:15 - 17:00) [503] ◦ S_2
izv. prof. dr. sc. Hadžisejdić Ita, dr. med. [503] · doc. dr. sc. Štemberger Christophe, dr. med. [1715]		
20.11.2026		
	P7. Neoplasms II: • P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [1430] ◦ P_2 • Pathology - Exercise room (11:15 - 14:00) [1080] ◦ P_1	
naslovni asistent Fadljević Tino, dr. med. [1080] · naslovni asistent Kovač Leo, dr. med. [1430]		
23.11.2026		
L8. General pathology of infectious diseases: • Pathology - Exercise room (14:15 - 15:00) [506] ◦ Pathology		
izv. prof. dr. sc. Babarović Emina, dr. med. [506]		
25.11.2026		
		S8. General pathology of Infectious diseases: • P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [506] ◦ S_2 • Pathology - Exercise room (11:15 - 14:00) [508] ◦ S_1

izv. prof. dr. sc. Avirović Manuela, dr. med. [508] · izv. prof. dr. sc. Babarović Emina, dr. med. [506]		
27.11.2026		
	P8. Immunopathology: • P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [1905] ◦ P_2 • Pathology - Exercise room (11:15 - 14:00) [1704] ◦ P_1	
naslovna asistentica Madžar Petra, dr. med. [1905] · naslovna asistentica Savić Vuković Anita, dr. med. [1704]		
30.11.2026		
L9. Skin: • Pathology - Exercise room (12:15 - 13:00) [511] ◦ Pathology		
izv. prof. dr. sc. Matušan Ilijaš Koviljka, dr. med. [511]		
02.12.2026		
		S9. Skin pathology (acute and inflammatory dermatoses, infectious dermatoses, blistering disorders and tumors): • Pathology - Exercise room (11:15 - 14:00) [501] ◦ S_2 • P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [511] ◦ S_1
prof. dr. sc. Jurinović Ksenija, dr. med. [501] · izv. prof. dr. sc. Matušan Ilijaš Koviljka, dr. med. [511]		
04.12.2026		
	P9. Skin: • P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [1905] ◦ P_2 • Pathology - Exercise room (11:15 - 14:00) [1907] ◦ P_1	
naslovna asistentica Madžar Petra, dr. med. [1905] · naslovna asistentica Murković Martina, dr. med. [1907]		
09.12.2026		
L10. Pathology of Oral cavities and gastrointestinal tract: • Pathology - Exercise room (11:15 - 12:00) [162] ◦ Pathology		S10. Pathology of Oral cavities and gastrointestinal tract: • P14 - PATHOLOGY of lecture halls (12:15 - 15:00) [162] ◦ S_1 • Pathology - Exercise room (12:15 - 15:00) [1715] ◦ S_2
izv. prof. dr. sc. Fučkar Čupić Dora, dr. med. [162] · doc. dr. sc. Štemberger Christophe, dr. med. [1715]		
11.12.2026		

	P10. Digestive system:
	• P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [1087]
	  ○ P_1
	• Pathology - Exercise room (11:15 - 14:00) [1430]
	  ○ P_2	

naslovna asistentica Holjević Ena, dr. med. [1087] · naslovni asistent Kovač Leo, dr. med. [1430]		
14.12.2026		
L11. Pathology of the liver and gallbladder: • Pathology - Exercise room (12:15 - 13:00) [162] ○ Pathology		
izv. prof. dr. sc. Fučkar Čupić Dora, dr. med. [162]		
16.12.2026		

		S11. Pathology of the liver and gallbladder:
		• P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [1715]
		  ○ S_1
		• Pathology - Exercise room (11:15 - 14:00) [162]
		  ○ S_2

izv. prof. dr. sc. Fučkar Čupić Dora, dr. med. [162] · doc. dr. sc. Štemberger Christophe, dr. med. [1715]		
18.12.2026		

	P11. Liver:
	• P14 - PATHOLOGY of lecture halls (13:15 - 16:00) [1907]
	  ○ P_1
	• Pathology - Exercise room (13:15 - 16:00) [1905]
	  ○ P_2	

naslovna asistentica Madžar Petra, dr. med. [1905] · naslovna asistentica Murković Martina, dr. med. [1907]		
21.12.2026		
L12. Pathology of the pancreas: • Pathology - Exercise room (12:15 - 13:00) [162] ○ Pathology		
izv. prof. dr. sc. Fučkar Čupić Dora, dr. med. [162]		
23.12.2026		

		S12. Endocrine pancreas (Diabetes mellitus and pancreatic neuroendocrine tumors):
		• Pathology - Exercise room (11:15 - 14:00) [162]
		  ○ S_1
		• P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [506]
		  ○ S_2

izv. prof. dr. sc. Babarović Emina, dr. med. [506] · izv. prof. dr. sc. Fučkar Čupić Dora, dr. med. [162]		

08.01.2027		

	P12. Pancreas:
	• Pathology - Exercise room (11:15 - 14:00) [1704]
	  ○ P_1
	• P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [1905]
	  ○ P_2	

naslovna asistentica Madžar Petra, dr. med. [1905] · naslovna asistentica Savić Vuković Anita, dr. med. [1704]		
11.01.2027		
L13. Pathology of the endocrine system: • Pathology - Exercise room (12:15 - 13:00) [508] ○ Pathology		
izv. prof. dr. sc. Avirović Manuela, dr. med. [508]		
13.01.2027		

		S13. Pathology of the endocrine system:
		• P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [506]
		  ○ S_1
		• Pathology - Exercise room (11:15 - 14:00) [508]
		  ○ S_2

izv. prof. dr. sc. Avirović Manuela, dr. med. [508] · izv. prof. dr. sc. Babarović Emina, dr. med. [506]		
15.01.2027		

	P13. Endocrine:
	• Pathology - Exercise room (11:00 - 14:00) [1907]
	  ○ P_2
	• P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [1905]
	  ○ P_1
	
	P14. On-line exercise overview of the teaching material completed so far and preparation for the oral exam.:
	• ONLINE (14:15 - 17:00) [506]
	  ○ P_2
	  ○ P_1	

izv. prof. dr. sc. Babarović Emina, dr. med. [506] · naslovna asistentica Madžar Petra, dr. med. [1905] · naslovna asistentica Murković Martina, dr. med. [1907]		
18.01.2027		
L14. The female genital system: • Pathology - Exercise room (13:15 - 14:00) [505] ○ Pathology		
prof. dr. sc. Eminović Senija, dr. med. [505]		

20.01.2027		
		S14. Pathology of female genital system: • P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [505] ◦ S_1 • Pathology - Exercise room (11:15 - 14:00) [506] ◦ S_2
izv. prof. dr. sc. Babarović Emina, dr. med. [506] · prof. dr. sc. Eminović Senija, dr. med. [505]		
22.01.2027		
	P15. The female sex system: • Pathology - Exercise room (11:00 - 14:00) [1087] ◦ P_2 • P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [1704] ◦ P_1 P16. On-line exercise overview of the teaching material completed so far and preparation for the oral exam.: • ONLINE (14:15 - 17:00) [1905] ◦ P_1 ◦ P_2	
naslovna asistentica Holjević Ena, dr. med. [1087] · naslovna asistentica Madžar Petra, dr. med. [1905] · naslovna asistentica Savić Vuković Anita, dr. med. [1704]		
25.01.2027		
L15. Pathology of the blood vessels: • Pathology - Exercise room (12:15 - 13:00) [511] ◦ Pathology		
izv. prof. dr. sc. Matušan Ilijaš Koviljka, dr. med. [511]		
27.01.2027		
		S15. Pathology of the blood vessels seminar with 2 virtual slides (http://mikromed.uniri.hr/srce%20i%20kz.html): • P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [511] ◦ S_1 • Pathology - Exercise room (11:15 - 14:00) [505] ◦ S_2
prof. dr. sc. Eminović Senija, dr. med. [505] · izv. prof. dr. sc. Matušan Ilijaš Koviljka, dr. med. [511]		
29.01.2027		

	P17. The female sex system:
	• Pathology - Exercise room (11:15 - 14:00) [1907]
	  ◦ P_2
	• P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [1430]
	  ◦ P_1
	
	P18. On-line exercise overview of the teaching material completed so far and preparation for the oral exam.:
	• ONLINE (14:15 - 17:00) [1905]
	  ◦ P_2
	  ◦ P_1	

naslovni asistent Kovač Leo, dr. med. [1430] · naslovna asistentica Madžar Petra, dr. med. [1905] · naslovna asistentica Murković Martina, dr. med. [1907]		
04.03.2027		

		S16. Pathology of the heart part 1 (heart failure, congenital heart diseases and ischemic heart disease):
		• Pathology - Exercise room (13:15 - 16:00) [505]
		  ◦ S_1
		• P14 - PATHOLOGY of lecture halls (13:15 - 16:00) [1715]
		  ◦ S_2

prof. dr. sc. Eminović Senija, dr. med. [505] · doc. dr. sc. Štemberger Christophe, dr. med. [1715]		
05.03.2027		

L16. Pathology of the heart part 1 (Heart failure and ischemic heart disease):
• Pathology - Exercise room (11:15 - 12:00) [505]
  ◦ Pathology
	P19. Blood vessels:
	• Pathology - Exercise room (12:15 - 15:00) [1080]
	  ◦ P_1
	• P14 - PATHOLOGY of lecture halls (12:15 - 15:00) [506]
	  ◦ P_2
	
	P20. On-line exercise overview of the teaching material completed so far and preparation for the oral exam.:
	• ONLINE (15:15 - 18:00) [506]
	  ◦ P_2
	  ◦ P_1	

izv. prof. dr. sc. Babarović Emina, dr. med. [506] · prof. dr. sc. Eminović Senija, dr. med. [505] · naslovni asistent Fadljević Tino, dr. med. [1080]		
11.03.2027		

		S17. Pathology of the heart part 2 (hypertensive heart disease, valvular heart disease, cardyomyopathies and myocarditis pericardial disease):
		• Pathology - Exercise room (13:15 - 16:00) [506]
		  ◦ S_1
		• P14 - PATHOLOGY of lecture halls (13:15 - 16:00) [511]
		  ◦ S_2

izv. prof. dr. sc. Babarović Emina, dr. med. [506] · izv. prof. dr. sc. Matušan Ilijaš Koviljka, dr. med. [511]		
12.03.2027		

L17. Pathology of the heart part 2 (Hypertensive heart disease, valvular heart disease, endocarditis):
• Pathology - Exercise room (11:15 - 12:00) [506]
  ○ Pathology
	P21. Kidney:
	• Pathology - Exercise room (12:15 - 15:00) [1080]
	  ○ P_1
	• P14 - PATHOLOGY of lecture halls (12:15 - 15:00) [1430]
	  ○ P_2
	
	P22. On-line exercise overview of the teaching material completed so far and preparation for the oral exam.:
	• ONLINE (15:15 - 18:00) [506]
	  ○ P_2
	  ○ P_1	

izv. prof. dr. sc. Babarović Emina, dr. med. [506] · naslovni asistent Fadljević Tino, dr. med. [1080] · naslovni asistent Kovač Leo, dr. med. [1430]		
18.03.2027		

		S18. Kidney and its collecting system:
		• P14 - PATHOLOGY of lecture halls (13:15 - 16:00) [506]
		  ○ S_1
		• Pathology - Exercise room (13:15 - 16:00) [506]
		  ○ S_2

izv. prof. dr. sc. Babarović Emina, dr. med. [506]		
19.03.2027		

L18. Pathology of the kidney and its collecting system:
• Pathology - Exercise room (11:15 - 12:00) [506]
  ○ Pathology
	P23. Kidney:
	• P14 - PATHOLOGY of lecture halls (12:15 - 15:00) [1087]
	  ○ P_1
	• Pathology - Exercise room (12:15 - 15:00) [1704]
	  ○ P_2
	
	P24. On-line exercise overview of the teaching material completed so far and preparation for the oral exam.:
	• ONLINE (15:15 - 18:00) [506]
	  ○ P_1
	  ○ P_2	

izv. prof. dr. sc. Babarović Emina, dr. med. [506] · naslovna asistentica Holjević Ena, dr. med. [1087] · naslovna asistentica Savić Vuković Anita, dr. med. [1704]		
25.03.2027		

		S19. Pathology of the lung part 1 (atelectasis, ARDS, obstructive and restrictive lung diseases, pulmonary diseases of vascular origin): • Pathology - Exercise room (13:15 - 16:00) [1715] ◦ S_1 • P14 - PATHOLOGY of lecture halls (13:15 - 16:00) [501] ◦ S_2
prof. dr. sc. Jurinović Ksenija, dr. med. [501] · doc. dr. sc. Štemberger Christophe, dr. med. [1715]		
26.03.2027		
L19. Pathology of the lung part 1 (Atelectasis, ARDS, Obstructive and restrictive lung diseases): • Pathology - Exercise room (11:15 - 12:00) [501] ◦ Pathology	P25. Respiratory system: • Pathology - Exercise room (12:15 - 15:00) [1080] ◦ P_1 • P14 - PATHOLOGY of lecture halls (12:15 - 15:00) [506] ◦ P_2 P26. On-line exercise overview of the teaching material completed so far and preparation for the oral exam.: • ONLINE (15:15 - 18:00) [506] ◦ P_2 ◦ P_1	
izv. prof. dr. sc. Babarović Emina, dr. med. [506] · naslovni asistent Fadljević Tino, dr. med. [1080] · prof. dr. sc. Jurinović Ksenija, dr. med. [501]		
01.04.2027		
		S20. Pathology of the lung part 2 (Pulmonary infections and lung tumors): • Pathology - Exercise room (13:15 - 16:00) [1715] ◦ S_1 • P14 - PATHOLOGY of lecture halls (13:15 - 16:00) [501] ◦ S_2
prof. dr. sc. Jurinović Ksenija, dr. med. [501] · doc. dr. sc. Štemberger Christophe, dr. med. [1715]		
02.04.2027		
L20. Pathology of the lung part 2 (Lung tumors): • Pathology - Exercise room (11:15 - 12:00) [1715] ◦ Pathology	P27. Respiratory system: • Pathology - Exercise room (12:15 - 15:00) [1430] ◦ P_1 • P14 - PATHOLOGY of lecture halls (12:15 - 15:00) [1080] ◦ P_2	S24. Central nervous system: • Pathology - Exercise room (11:15 - 16:00) [501] ◦ S_2
naslovni asistent Fadljević Tino, dr. med. [1080] · prof. dr. sc. Jurinović Ksenija, dr. med. [501] · naslovni asistent Kovač Leo, dr. med. [1430] · doc. dr. sc. Štemberger Christophe, dr. med. [1715]		
08.04.2027		
		S21. Breast pathology: • Pathology - Exercise room (13:15 - 16:00) [508] ◦ S_1 • P14 - PATHOLOGY of lecture halls (13:15 - 16:00) [506] ◦ S_2

izv. prof. dr. sc. Avirović Manuela, dr. med. [508] · izv. prof. dr. sc. Babarović Emina, dr. med. [506]		
09.04.2027		
L21. Breast pathology: • Pathology - Exercise room (11:15 - 12:00) [508] ○ Pathology	P28. Breast: • Pathology - Exercise room (12:15 - 15:00) [1704] ○ P_1 • P14 - PATHOLOGY of lecture halls (12:15 - 15:00) [1087] ○ P_2	
izv. prof. dr. sc. Avirović Manuela, dr. med. [508] · naslovna asistentica Holjević Ena, dr. med. [1087] · naslovna asistentica Savić Vuković Anita, dr. med. [1704]		
15.04.2027		
		S22. Male genital system and lower urinary tract: • P14 - PATHOLOGY of lecture halls (13:15 - 16:00) [506] ○ S_1 • Pathology - Exercise room (13:15 - 16:00) [506] ○ S_2
izv. prof. dr. sc. Babarović Emina, dr. med. [506]		
16.04.2027		
L22. Male genital system and lower urinary tract: • Pathology - Exercise room (11:15 - 12:00) [506] ○ Pathology	P29. The male genital system: • P14 - PATHOLOGY of lecture halls (12:15 - 15:00) [1430] ○ P_1 • Pathology - Exercise room (12:15 - 15:00) [1080] ○ P_2	
izv. prof. dr. sc. Babarović Emina, dr. med. [506] · naslovni asistent Fadljević Tino, dr. med. [1080] · naslovni asistent Kovač Leo, dr. med. [1430]		
22.04.2027		
		S23. Bones, joints and soft tissue: • Pathology - Exercise room (13:15 - 16:00) [503] ○ S_1 • P14 - PATHOLOGY of lecture halls (13:15 - 16:00) [506] ○ S_2
izv. prof. dr. sc. Babarović Emina, dr. med. [506] · izv. prof. dr. sc. Hadžisejdić Ita, dr. med. [503]		
23.04.2027		
L23. Pathology of the bones, joints and soft tissue: • Pathology - Exercise room (11:15 - 12:00) [503] ○ Pathology	P30. Bone system, joints and soft tissues: • Pathology - Exercise room (12:15 - 15:00) [506] ○ P_1 • P14 - PATHOLOGY of lecture halls (12:15 - 15:00) [1430] ○ P_2	
izv. prof. dr. sc. Babarović Emina, dr. med. [506] · izv. prof. dr. sc. Hadžisejdić Ita, dr. med. [503] · naslovni asistent Kovač Leo, dr. med. [1430]		
29.04.2027		

L24. Central nervous system: • Pathology - Exercise room (11:15 - 12:00) [505] ◦ Pathology		S24. Central nervous system: • P14 - PATHOLOGY of lecture halls (13:15 - 16:00) [505] ◦ S_1 • Pathology - Exercise room (13:15 - 16:00) [501] ◦ S_2
prof. dr. sc. Eminović Senija, dr. med. [505] · prof. dr. sc. Jurinović Ksenija, dr. med. [501]		
30.04.2027		
	P31. Central nervous system: • Pathology - Exercise room (11:15 - 14:00) [1704] ◦ P_2 • P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [1080] ◦ P_1	
naslovni asistent Fadljević Tino, dr. med. [1080] · naslovna asistentica Savić Vuković Anita, dr. med. [1704]		
06.05.2027		
L25. Pathology of hematopoietic and lymphoid system: • Pathology - Exercise room (12:15 - 13:00) [503] ◦ Pathology		S25. Pathology of hematopoietic and lymphoid system: • Pathology - Exercise room (13:15 - 16:00) [503] ◦ S_1 • P14 - PATHOLOGY of lecture halls (13:15 - 16:00) [1205] ◦ S_2
izv. prof. dr. sc. Hadžisejdić Ita, dr. med. [503] · doc. dr. sc. Seili - Bekafigo Irena, dr. med. [1205]		
07.05.2027		
	P32.Hematopoietic and lympoid system: • Pathology - Exercise room (11:15 - 14:00) [1080] ◦ P_1 • P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [1087] ◦ P_2	
naslovni asistent Fadljević Tino, dr. med. [1080] · naslovna asistentica Holjević Ena, dr. med. [1087]		
13.05.2027		
L26. Autopsy: • Pathology - Exercise room (11:15 - 12:00) [1715] ◦ Pathology		S26. Diagnostic techniques in pathology: • Pathology - Exercise room (12:15 - 15:00) [506] ◦ S_1 • P14 - PATHOLOGY of lecture halls (12:15 - 15:00) [1715] ◦ S_2
izv. prof. dr. sc. Babarović Emina, dr. med. [506] · doc. dr. sc. Štemberger Christophe, dr. med. [1715]		
14.05.2027		

	P33. Cytology: • Pathology - Exercise room (11:15 - 14:00) [1080] ○ P_1 • P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [1087] ○ P_2	
naslovni asistent Fadljević Tino, dr. med. [1080] · naslovna asistentica Holjević Ena, dr. med. [1087]		
20.05.2027		
L27. Molecular pathology: • Pathology - Exercise room (11:15 - 12:00) [503] ○ Pathology		S27. Molecular pathology: • Pathology - Exercise room (12:15 - 15:00) [506] ○ S_1 • P14 - PATHOLOGY of lecture halls (12:15 - 15:00) [503] ○ S_2
izv. prof. dr. sc. Babarović Emina, dr. med. [506] · izv. prof. dr. sc. Hadžisejdić Ita, dr. med. [503]		
21.05.2027		
	P34. Autopsy with clinico pathological correlation: • P14 - PATHOLOGY of lecture halls (11:15 - 14:00) [1704] ○ P_1 • Pathology - Exercise room (11:15 - 14:00) [1087] ○ P_2	
naslovna asistentica Holjević Ena, dr. med. [1087] · naslovna asistentica Savić Vuković Anita, dr. med. [1704]		

List of lectures, seminars and practicals:

LECTURES (TOPIC)	Number of hours	Location
L1. The Pathology – introduction to the course	1	Pathology - Exercise room
L2. Overview of inflammation: Definition and general features	1	Pathology - Exercise room
L3. Chronic Inflammation	1	Pathology - Exercise room
L4. Hemodynamic disorders	1	Pathology - Exercise room
L5. Diseases of the Immune System	1	Pathology - Exercise room
L6. Neoplasia part 1 Nomenclature, Characteristics of benign and malignant neoplasms, epidemiology, Clinical aspects of neoplasms	1	Pathology - Exercise room
L7. Neoplasia part 2 Carcinogenesis: A multistep process. Etiology of cancer – Carcinogenic agents	1	Pathology - Exercise room
L8. General pathology of infectious diseases	1	Pathology - Exercise room
L9. Skin	1	Pathology - Exercise room
L10. Pathology of Oral cavities and gastrointestinal tract	1	Pathology - Exercise room
L11. Pathology of the liver and gallbladder	1	Pathology - Exercise room
L12. Pathology of the pancreas	1	Pathology - Exercise room
L13. Pathology of the endocrine system	1	Pathology - Exercise room
L14. The female genital system	1	Pathology - Exercise room

L15. Pathology of the blood vessels	1	Pathology - Exercise room
L16. Pathology of the heart part 1 (Heart failure and ischemic heart disease)	1	Pathology - Exercise room
L17. Pathology of the heart part 2 (Hypertensive heart disease, valvular heart disease, endocarditis)	1	Pathology - Exercise room
L18. Pathology of the kidney and its collecting system	1	Pathology - Exercise room
L19. Pathology of the lung part 1 (Atelectasis, ARDS, Obstructive and restrictive lung diseases)	1	Pathology - Exercise room
L20. Pathology of the lung part 2 (Lung tumors)	1	Pathology - Exercise room
L21. Breast pathology	1	Pathology - Exercise room
L22. Male genital system and lower urinary tract	1	Pathology - Exercise room
L23. Pathology of the bones, joints and soft tissue	1	Pathology - Exercise room
L24. Central nervous system	1	Pathology - Exercise room
L25. Pathology of hematopoietic and lymphoid system	1	Pathology - Exercise room
L26. Autopsy	1	Pathology - Exercise room
L27. Molecular pathology	1	Pathology - Exercise room

PRACTICALS (TOPIC)	Number of hours	Location
P1. Cellular pathology	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
P2. Inflammation	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
P3. Hemodynamic disorders 1	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
P4. Hemodynamic disorders 2	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
P5. Genetic and pediatric diseases + Environmental and Nutritional diseases – Student seminar	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
P6. Neoplasms I	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
P7. Neoplasms II	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
P8. Immunopathology	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
P9. Skin	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
P10. Digestive system	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
P11. Liver	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
P12. Pancreas	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
P13. Endocrine	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
P14. On-line exercise overview of the teaching material completed so far and preparation for the oral exam.	3	ONLINE

P15. The female sex system	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
P16. On-line exercise overview of the teaching material completed so far and preparation for the oral exam.	3	ONLINE
P17. The female sex system	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
P18. On-line exercise overview of the teaching material completed so far and preparation for the oral exam.	3	ONLINE
P19. Blood vessels	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
P20. On-line exercise overview of the teaching material completed so far and preparation for the oral exam.	3	ONLINE
P21. Kidney	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
P22. On-line exercise overview of the teaching material completed so far and preparation for the oral exam.	3	ONLINE
P23. Kidney	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
P24. On-line exercise overview of the teaching material completed so far and preparation for the oral exam.	3	ONLINE
P25. Respiratory system	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
P26. On-line exercise overview of the teaching material completed so far and preparation for the oral exam.	3	ONLINE
P27. Respiratory system	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
P28. Breast	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
P29. The male genital system	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
P30. Bone system, joints and soft tissues	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
P31. Central nervous system	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
P32.Hematopoietic and lympoid system	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
P33. Cytology	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
P34. Autopsy with clinico pathological correlation	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room

SEMINARS (TOPIC)	Number of hours	Location
S1. Cell Injury, Cell death and cellular adaptations	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
S2. Acute inflammation, Morphologic patterns of acute inflammation and outcomes	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
S3. Chronic inflammation and tissue repair	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room

S4. Hemodynamic disorders	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
S5. Autoimmune diseasses, rejection to transplants and amyloidosis seminar with 3 virtual slides (http://mikromed.uniri.hr/ostalo.html)	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
S6. Neoplasia part 1 Nomenclature, Characteristics of benign and malignant neoplasms, epidemiology, Clinical aspects of neoplasms	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
S7. Neoplasia part 2 (Etiology of cancer: carcinogenic agents)	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
S8. General pathology of Infectious diseases	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
S9. Skin pathology (acute and inflammatory dermatoses, infectious dermatoses, blistering disorders and tumors)	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
S10. Pathology of Oral cavities and gastrointestinal tract	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
S11. Pathology of the liver and gallbladder	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
S12. Endocrine pancreas (Diabetes mellitus and pancreatic neuroendocrine tumors)	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
S13. Pathology of the endocrine system	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
S14. Pathology of female genital system	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
S15. Pathology of the blood vessels seminar with 2 virtual slides (http://mikromed.uniri.hr/srce%20i%20kz.html)	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
S16. Pathology of the heart part 1 (heart failure, congenital heart diseases and ischemic heart disease)	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
S17. Pathology of the heart part 2 (hypertensive heart disease, valvular heart disease, cardyomyopathies and myocarditis pericardial disease)	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
S18. Kidney and its collecting system	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
S19. Pathology of the lung part 1 (atelectasis, ARDS, obstructive and restrictive lung diseases, pulmonary diseases of vascular origin)	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
S20. Pathology of the lung part 2 (Pulmonary infections and lung tumors)	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
S21. Breast pathology	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
S22. Male genital system and lower urinary tract	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
S23. Bones, joints and soft tissue	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
S24. Central nervous system	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
S25. Pathology of hematopoietic and lymphoid system	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
S26. Diagnostic techniques in pathology	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room
S27. Molecular pathology	3	P14 - PATHOLOGY of lecture halls Pathology - Exercise room

EXAM DATES (final exam):

1.	14.06.2027.
2.	30.06.2027.
3.	13.07.2027.
4.	03.09.2027.
5.	17.09.2027.