



**48SJ-PATH22**  
**ECTS: 9.00**  
**CYCLE: 2024Z**

## Course syllabus - part A Pathology 2/2

### SUBJECT MATTER CONTENT

#### LECTURE

LECTURES: 1. Liver and pancreas pathology (16.10.2024) 2. Endocrine pathology (16.10.2024) 3. Pathology of the female genital system (23.10.2024) 4. Breast pathology (06.11.2024) 5. Pathology of the male genital system and prostate gland (20.11.2024) 6. Pathology of the urinary tract and kidneys (27.11.2024) 7. Skin pathology (04.12.2024) 8. Pathology of the soft tissue, bones and joints (18.12.2024) 9. Pathology of the nervous system (22.01.2025) 10. Hemathopathology (29.01.2025)

#### SEMINAR

SEMINARS: At each seminar, students prepare 30-45 minute presentations on the topics listed below. The seminar groups are asked to divide the topics among themselves. We start our presentations with the first seminar classes. ALL of the following topics must be covered during seminars. Depending on the size of the group it may happen that a student will present more than one topic. Please take it into consideration while dividing topics. Sem. 1: Pathology of the pancreas, liver, biliary tree and gallbladder. Topic 1.1. Autoimmune pancreatitis- classification, clinical and histopathological picture. Cholecystolithiasis. Topic 1.2. Viral hepatitis, autoimmune cholangiopathies (primary cholangitis, primary sclerosing cholangitis) - pathogenesis, clinical and histopathological picture. Sem. 2: Pathology of the endocrine system. Topic 2.1. Posterior pituitary syndromes and pituitary insufficiency - pathogenesis, classification, clinical picture. Topic 2.2. Diseases of the endocrine pancreas - diabetes. Neuroendocrine neoplasms of pancreas. Sem. 3: Human Papilloma Virus-related neoplasms (head and neck, genital system). Topic 3.1. Molecular mechanisms of HPV-induced carcinogenesis Topic 3.2. HPV vaccines Sem. 4: Diseases of pregnancy. Topic 4.1. Gestational trophoblastic disease- classification, clinical and histopathological picture Topic 4.2. Arterial hypertension and diabetes in pregnancy, eclampsia and pre-eclampsia. Sem. 5: Pathology of the prostate gland and infectious diseases of genital system. Topic 5.1. Prostatitis and benign prostate hyperplasia - pathogenesis, clinical and histopathological picture. Topic 5.2. Sexually transmitted diseases - syphilis, gonorrhoea, herpes, venereal granuloma, inguinal granuloma, soft chancre. Sem. 6: Pathology of the urinary tract, urinary bladder and kidneys. Topic 6.1. Pathogenesis, classification, types, clinical picture and histopathological features of glomerulonephritis. Topic 6.2. Cystitis and nephrolithiasis - classification, clinical and histopathological picture. Sem. 7: Dermatoses. Topic 7.1. Blistering skin diseases - classification, pathogenesis, clinical and histopathological picture. Topic 7.2. Behcet's disease, granuloma annulare, psoriasis, lichen planus - pathogenesis, clinical and histopathological picture. Sem. 8: Pathology of the soft tissue, bones and joints. Pathology of the muscles and peripheral nervous system. Topic 8.1. Osteoporosis, rheumatoid arthritis, systemic lupus erythematosus - pathogenesis, clinical and histopathological picture. Topic 8.2. Skeletal muscle disorders - muscular dystrophies, congenital and acquired myopathies - pathogenesis, classification, clinical features. Sem. 9: Pathology of nervous system. Topic 9.1. Tauopathies - pathogenesis,

**Legal acts specifying learning outcomes:**  
311/2023

**Disciplines:** medical sciences

**Status of the**

**course:**Obligatoryjny

**Group of courses:**A -

przedmioty podstawowe

**Code:** ISCED 0912

**Field of study:**Medicine

**Scope of education:**

**Profile of education:**

General academic

**Form of studies:** full-time

**Level of studies:** uniform

master's studies

**Year/semester:** 3/5

**Types of classes:** Lecture, Seminar, Classes

**Number of hours in semester:**Lecture: 20.00, Seminar: 20.00, Classes: 60.00

**Language of**

**instruction:**English

**Introductory subject:**

Anatomy 2/2, Histology with Cytophysiology and Embryology 2/2, Biochemistry with Elements of Chemistry 2/2, Molecular Biology and Genetics, Microbiology, Physiology 2/2, Pathology 1/2  
**Prerequisites:** Anatomy 2/2, Histology with Cytophysiology and Embryology 2/2, Biochemistry with Elements of Chemistry 2/2, Molecular Biology and Genetics, Microbiology, Physiology 2/2, Pathology 1/2

**Name of the organisational unit conducting the**

**course:**Katedra Patomorfologii i Medycyny Sądowej

**Person responsible for the**

**realization of the course:**dr

n. med. Aleksandra Sejda, dr

hab. n. med. Konrad

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**Additional remarks:**

classification, clinical and neuropathological features. Topic 9.2. Synucleinopathies - pathogenesis, classification, clinical and neuropathological features. Sem. 10: Hematopathology. Topic 10.1. Anemias - classification, pathogenesis, clinical picture. Topic 10.2. Benign and malignant neoplasms of the thymus - classification, clinical and histopathological picture. SEMINARS GROUP 1 AND 2 Date 29.10 12.11 10.01 21.01 24.01 28.01 31.01 Topic 1.1, 1.2, 2.1 2.2, 3.1, 3.2 4.1, 4.2, 5.1 5.2, 6.1, 6.2 7.1, 7.2, 8.1 8.2, 9.1, 9.2 10.1, 10.2 SEMINARS GROUP 3 date 18.11 25.11 2.12 7.01 14.01 28.01 topic 1.1, 1.2, 2.1 2.2, 3.1, 3.2 4.1, 4.2, 5.1 5.2, 6.1, 6.2 7.1, 7.2, 8.1, 8.2 9.1, 9.2, 10.1, 10.2 Pathology Exam term I - 05.02.2025 Pathology Exam term II - 13.02.2025

## CLASSES

1. Pathology of the pancreas, liver. (2.10. 2024, 3.10.2024) 2. Pathology of the endocrine system. (9.10.2024, 10.10.2024) 3. Pathology of the female genital system. (17.10.2024, 23.10.2024) 4. Pathology of the breast. (24.10.2024, 6.11.2024) 5. Pathology of the male genital system. (7.11.2024, 13.11.2024) 6. Pathology of the urinary tract and Kidney. (20.11.2024, 5.12.2024) 7. Pathology of the skin. (27.11.2024, 12.12.2024) 8. Pathology of the soft tissue. (4.12.2024, 8.01.2025, 9.01.2024) 9. Pathology of bones and joints. (11.12.2024, 9.01.2025, 13.01.2025) 10. Pathology of central nervous system. (18.12.2024, 15.01.2025, 16.01.2025) 11. Hematopathology- bone marrow. (15.01.2025, 16.01.2025, 21.01.2025) 12. Hematopathology- lymph nodes. (16.01.2025, 22.01.2025, 23.01.2025) 13. General Pathology- repetition. (23.01.2025, 27.01.2025, 27.01.2025)

## TEACHING OBJECTIVE

General Pathology and Systemic Pathology: study and understanding of the basis of the disorders treated in hospitals and outpatients clinics. Interpretation of cytologic and histopathologic examinations records. Mastering of attitudes and behaviours in accordance with medical ethics.

## DESCRIPTION OF THE LEARNING OUTCOMES OF THE COURSE IN RELATION TO THE DESCRIPTION OF THE CHARACTERISTICS OF THE SECOND LEVEL LEARNING OUTCOMES FOR QUALIFICATIONS AT LEVELS 6-8 OF THE POLISH QUALIFICATION FRAMEWORK IN RELATION TO THE SCIENTIFIC DISCIPLINES AND THE EFFECTS FOR FIELDS OF STUDY:

**Symbols for outcomes related to the discipline:**

M/NMA\_P7S\_WG+++ , M/NMA\_P7S\_KO+

**Symbols for outcomes related to the field of study:**

C.W30.+ , KA7\_KO1+ , C.W26.+ , K.4.+ , C.W27.+ , K.9.+ , C.W31.+ , C.U3.+ , K.2.+ , K.3.+ , K.5.+ , C.W28.+ , C.W23.+ , D.U13.+ , D.U17.+ , K.7.+ , C.W29.+ , C.W32.+ , C.U11.+

## LEARNING OUTCOMES:

### Knowledge:

W1 - C.W.27 Basic mechanisms of cell and tissue injury.

W2 - C.W.28 Clinical course of specific and non-specific inflammation and regeneration processes of tissues and organs.

W3 - C.W.29. Definition and pathophysiology of shock, with particular emphasis on the differentiation of causes of shock and multiorgan failure.

W4 - C.W.30. Etiology of hemodynamic disorders, regressive and progressive changes.

W5 - C.W.31. Issues in the field of systemic surgical pathology, macro- and microscopic images and the clinical course of pathomorphological

changes in particular organs

W6 - C.W.32. Consequences of developing pathological changes for topographically adjacent organs.

W7 - C.W.26. Patomorphological nomenclature.

W8 - types of hypersensitivity reactions, types of immunodeficiencies and basics of immunomodulation;

### **Skills:**

U1 - C.U.11. Relate the images of tissue and organ damage with clinical manifestations of the disease, medical history and laboratory test results

U2 - make decisions about the need to perform cytogenetic and molecular tests;

U3 - critically analyze medical literature, including in English, and draw conclusions;

U4 - follow ethical standards in professional activities;

### **Social competence:**

K1 - K.2. Guiding the patient's well-being

K2 - K.3. Compliance with medical confidentiality and patient's rights

K3 - K.4. behaving with dignity and respect in the presence of human bodies and remains

K4 -

K5 - K.7. Use of objective sources of information.

K6 - K.9. Implementation of the principles of professional camaraderie and cooperation in a team of specialists, including representatives of other medical professions, also in a multicultural and multinational environment.

K7 - K.5. perceiving and recognizing one's own limitations and self-assessing deficits and educational needs

### **TEACHING FORMS AND METHODS:**

Lecture(W1;W2;W3;W4;W5;W6;W7;W8;U1;U2;U3;U4;K1;K2;K3;K4;K5;K6;K7;):Explanation of the topic to the students and active discussion.

Seminar(W1;W2;W3;W4;W5;W6;W7;W8;U1;U2;U3;U4;K1;K2;K3;K4;K5;K6;K7;):Oral presentation of the topic by the student and active discussion.

Classes(W1;W2;W3;W4;W5;W6;W7;W8;U1;U2;U3;U4;K1;K2;K3;K4;K5;K6;K7;):Teaching methods: practical exercises with case studies, demonstration of microscopic slides, interpretation of microscopic images with correlation to clinical data, autopsies.

### **FORM AND CONDITIONS OF VERIFYING LEARNING**

#### **OUTCOMES:**

Lecture (Part in the discussion) - Lectures a. Student gets a passing grade based upon presence and active participation in lectures. b. All topics and materials given during the lecture will be included in the Final Examination. -

Lecture (Written exam) - a. To take the Examination Student must pass all practical classes, seminars and lectures, and receive a final passing grade from both, IV-th and V-th semester. b. The exam takes place after the end of the teaching cycle and takes the form of a single-choice test. The exam consists of a theoretical part (75 questions) and a practical part (5 questions) including test questions for macroscopic and microscopic photos presented on slides. c. Material and knowledge required for the Examination includes all seminars, practical classes and lectures. d. Together with the examination test, the student receives an answer sheet, which he fills out in block letters. Only the answer sheet is assessed. If the student changes his or her answer, the student signs his or her signature on the above-mentioned card, next to the crossed out and changed answer. e. The person responsible for conducting the exam and determining the place and date of the exam is the Subject Coordinator or a person designated by him f. Scale of grades: 0-59% - fail (niedostateczny - 2) 60-68% - satisfactory (dostateczny - 3) 69-76% - satisfactory plus (dostateczny plus - 3,5) 77-84% - good (dobry - 4)

85-92% - good plus (dobry plus - 4,5) 93-100% - very good (bardzo dobry - 5). g. In case of failing grade from the First-Time Examination, Student has a right to retake the Examination twice, in written form, graded according to the rules of the First-Time Examination. There is no possibility to retake the Examination orally. The date of each Retake Examination will be set by the Coordinator of a Subject or a person designated by the Coordinator, and will be the same for every Student, who fails previous Examination or who was absent during previous Examination. h. All doubts and objections raised to the Examination questions will be taken under consideration according to the Rules and Regulations of Studies. i. Receiving positive (passing) grade from the Final Examination is necessary to obtain passing grade from the Subject of Pathomorphology. j. Checking the cards by the student is possible in the Department only. This date will be available on the website immediately after the examination. Otherwise, access to the answer sheets will not be possible. Access to the examination test is possible after submitting written applications to the Head of the Department of Pathology and Forensic Medicine. It is forbidden to hold a mobile phone or a pen while viewing the examination test. -

Seminar (Evaluation of the work and cooperation in the group) - a. Seminars are conducted in the form of multimedia presentations presented by students. b. The topics of the seminars are presented in the schedule given at the beginning of the semester, available on the website of the Department of Pathomorphology and Forensic Medicine and on the board at the headquarters of the department conducting the classes. c. At each seminar, two people prepare 30-45 minute presentations. d. The student receives credit for the seminars based on the grade for the presentation, activity and the student's cooperation during classes. A student who does not demonstrate knowledge in a given seminar class fail the seminar and will be treated as absent from classes requiring making up in accordance with the principles set out in point 4. -

Classes (Evaluation of the work and cooperation in the group) - a. Theoretical knowledge may be checked orally during each practical class. Required knowledge includes subject of present practical class and all previous practical classes. In case of lack of answers for the questions asked by the teacher student may fail to pass a practical class, and will be obliged to retake this class basing on the rules and regulations described in paragraph 4. b. Informations about material and knowledge required for practical classes must be provided at least one week before these classes. c. Topics of practical classes are given in a form of a schedule on a website of the Department of Pathomorphology and hanged on an information board at the department. -

#### **BASIC LITERATURE:**

1. Vinay Kumar, Abul K. Abbas, Jon C. Aster, *Robbins Basic Pathology*, Tom tenth edit, Wyd. Elsevier, R. 2017

#### **SUPPLEMENTARY LITERATURE:**

## Detailed description of ECTS credits awarded - part B

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### Pathology 2/2

The number of ECTS credits awarded consists of:

1. Contact hours with the academic teacher:

- participation in: Lecture	20.0 h
- participation in: Seminar	20.0 h
- participation in: Classes	60.0 h
- consultation	5.0
	Total: 105.0 h.

2. Independent work of a student:

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Total: 120.0 h

contact hours + independent work of a student Total: 225.0 h

1 ECTS credit = 25-30 h of an average student's work, number of ECTS credit = 225.0 h : 25.0 h/ECTS = 9.00 ECTS on average: 9.0 ECTS

- including the number of ECTS credits for contact hours with the direct participation of an academic teacher: 0,00 ECTS points,

- including the number of ECTS credits for hours of independent work of a student: