

48SJO-PATHO 2025 ECTS: 12.50

## Course sylabus – part A Pathology

#### **SUBJECT MATTER CONTENT:**

#### Seminar

The scope of the classes includes topics in general and systemic pathology (amyloidosis, shock, infectious diseases, inflammation, hypersensitivity reactions and immune disorders, diseases related to the environment and nutrition, neoplasms, diseases of the lungs, pleura, heart, blood vessels, salivary glands, gastrointestinal tract, pediatric pathology, diseases of the pancreas, liver, endocrine system, soft tissues and bones, male and female reproductive organs, pathology of pregnancy and placenta, dermatopathology, uropathology, neuropathology, hematopathology).

#### Classes

The scope of the classes covers topics in general pathology (cell injury and death, adaptive processes, circulatory disorders, inflammation, fundamentals of oncology) as well as systemic pathology (diseases of blood vessels, heart, lungs and pleura, head and neck region, pediatric diseases, pathology of the gastrointestinal tract, pancreas, liver, gallbladder and biliary tract, pathology of endocrine organs, soft tissues, bones and joints, female and male reproductive organs, breast, uropathology, dermatopathology, neuropathology, hematopathology).

#### Lecture

The lecture topics include general pathology (cell injury and death, adaptive processes, circulatory disturbances, inflammation, neoplasms) and organ-specific pathology (pediatric pathology, cardiovascular pathology, head and neck pathology, diseases of the lungs and pleura, pathology of the gastrointestinal tract, pancreas, liver and biliary system, endocrine organs, female reproductive system and breast, male reproductive organs, skin, soft tissues, bones and joints, uropathology, neuropathology, and hematopathology).

### **TEACHING OBJECTIVE:**

Understanding the etiology, pathogenesis, and morphological changes at the macroscopic and microscopic levels in the course of diseases affecting various systems, including genetic and environmental factors.

Demonstrating the pathoclinical relationships in the course of different diseases. Gaining knowledge in general and systemic pathology, including the representation of macroscopic and microscopic pathological changes and their clinical consequences, along with proper pathological nomenclature. Acquiring knowledge of the basis of telepathology and digital pathology. Developing positive attitudes and behaviors in accordance with medical ethics.

Legal acts specifying learning outcomes:

311/2023 (Medicine), Status of the course: None Group of courses:None Discipline: Medical Sciences

Classes: Lecture (40 h) Seminar (40 h) Classes (80 h)

**Step**: Kierunek lekarski trzeci rok (oferta w jęz.

angielskim dla obcokrajowców) **Program:** Medicine **Form of studies:**full-time

Level of studies: uniform master's studies

Introductory subject: Anatomy, Histology with Cytophysiology and Embryology, Molecular Biology and Genetics, Microbiology

**Prerequisites:** Anatomy, Histology with Cytophysiology and Embryology, Molecular Biology and Genetics, Microbiology

#### **Coordinators:**

Aleksandra Sejda, aleksandra.sejda@uwm.edu.pl

Anna Kabać-Obrączka, anna.kabacobraczka@uwm.edu.pl 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:

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

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

### **LEARNING OUTCOMES (Knowledge, Skills, Social competence):**

**W1** Basic mechanisms of cell and tissue injury

<u>W2</u> Clinical course of specific and non-specific inflammation

and regeneration processes of tissues and organs.

<u>W3</u> Patomorphological nomenclature.

W4 Definition and pathophysiology of shock, with particular

emphasis on the differentiation of causes of shock and

multiorgan failure.

<u>W5</u> Etiology of hemodynamic disorders, regressive and

progressive changes.

<u>W6</u> Issues in the field of systemic surgical pathology, macroand

microscopic images and the clinical course of

pathomorphological

changes in particular organs

W7 types of hypersensitivity reactions, types of immunodeficiencies

and basics of immunomodulation;

<u>W8</u> Consequences of developing pathological changes for

topographically adjacent organs.

<u>U1</u> Relate the images of tissue and organ damage with clinical

manifestations of the disease, medical history and laboratory

test results

<u>U2</u> make decisions about the need to perform cytogenetic and

molecular tests;

<u>U3</u> critically analyze medical literature, including in English, and

draw

conclusions;

<u>U4</u> follow ethical standards in professional activities;

<u>K1</u> Use of objective sources of information

**<u>K2</u>** behaving with dignity and respect in the presence of human

bodies and remains

**K3** 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.

<u>K4</u> Compliance with medical confidentiality and patient's rights

<u>K5</u> perceiving and recognizing one's own limitations and

selfassessing deficits and educational needs

Guiding the patient's well-being

К6

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

Seminar-['W1', 'U1', 'K1', 'W2', 'U2', 'K2', 'W3', 'U3', 'K3', 'W4', 'U4', 'K4', 'W5', 'K5', 'W6', 'K6', 'W7', 'W8']-Discussion and evaluation of multimedia presentations prepared by students, in the form of 30-45 minute talks on topics listed in the seminar schedule, based on knowledge drawn from specialistic literature as well as reports published in scientific journals.

Classes-['W1', 'U1', 'K1', 'W2', 'U2', 'K2', 'W3', 'U3', 'K3', 'W4', 'U4', 'K4', 'W5', 'K5', 'W6', 'K6', 'W7', 'W8']-Discussion of presented clinicopathological cases, including the pathogenesis, etiology, morphology, clinical features of diseases, and prognosis. Interpretation of macroscopic and microscopic images, use of telepathology in daily practice. Practical classes include familiarization with the Department of Pathomorphology, principles of handling tissue and cytological material, use of ancillary tests in histopathological diagnostics, principles of macroscopic and microscopic examination. Autopsies - technique of performance, discussion of identified macroscopic and microscopic changes in a clinical context, determination of the cause of death and comorbidities, principles of writing the autopsy report.

Lecture-['W1', 'U1', 'K1', 'W2', 'U2', 'K2', 'W3', 'U3', 'K3', 'W4', 'U4', 'K4', 'W5', 'K5', 'W6', 'K6', 'W7', 'W8']-Multimedia lecture accompanied by discussion.

#### FORM AND CONDITIONS OF VERIFYING LEARNING OUTCOMES:

Seminar-(Evaluation of the work and cooperation in the group)-[]-Seminars are mandatory. The student obtains credit for the seminars based on the evaluation of the presented presentations, the student's activity, and cooperation during the classes. The seminar topics are specified in the schedule provided at the beginning of the semester, available on the website of the Department of Pathomorphology and Forensic Medicine at UWM and on the notice board at the department conducting the classes.

Classes-(Evaluation of the work and cooperation in the group)-['W1', 'U1', 'K1', 'W2', 'U2', 'K2', 'W3', 'U3', 'K3', 'W4', 'U4', 'K4', 'W5', 'K5', 'W6', 'K6', 'W7', 'W8']-Exercises are mandatory. The oral assessment is based on student attendance and participation during the completion of the exercise topics. The topics of the exercises are specified in the schedule provided at the beginning of each semester, available on the website of the Department of Pathomorphology and Forensic Medicine at UWM and on the notice board at the department conducting the classes.

Lecture-(Written exam)-['W1', 'U1', 'K1', 'W2', 'U2', 'K2', 'W3', 'U3', 'K3', 'W4', 'U4', 'K4', 'W5', 'K5', 'W6', 'K6', 'W7', 'W8']-Lectures are mandatory. In order to be eligible to take the final exam, students must complete all components of the course (lectures, exercises, seminars). The exam material covers the topics discussed during seminars, lectures, and practical exercises. The exam takes place after the completion of the teaching cycle and is conducted in the form of a single-choice test. It consists of a theoretical part (75 questions) and a practical part (5 questions) based on test questions related to macroscopic and microscopic images presented on slides.

### Grading scale:

0-47 points - fail - not passed

48-54 points - satisfactory

55-61 points - satisfactory plus

62-67 points - good

68-74 points - good plus

75-80 points - very good

In case of a failing the first exam attempt, students are allowed two additional written retakes, under the same evaluation criteria as the first attempt. Oral retakes are not permitted.

Lecture topics are specified in the schedule published at the beginning of each semester on the website of the Department of Pathomorphology and Forensic Medicine at UWM, as well as on the notice board located in the department where the classes are held.

### Literature:

- 1. *Robbins Basic Pathology*, Vinay Kumar, Abul K. Abbas, Jon C. Aster, Tom tenth edit, Wyd. Elsevier, 2017, Strony: , Tom: (literatura podstawowa)
- 2. **8th Edition of the UICC TNM classification of Malignant Tumors**, Brierley J, Gospodarowicz M, Wittekind Ch, Wiley, 2017, Strony: , Tom: (literatura uzupełniająca)



## **48SJO-PATHO** 2025

**ECTS: 12.50** 

# Detailed description of ECTS credits awarded - part B **Pathology**

The number of ECTS credits awarded consists of:

1. Contact hours with the academic teacher:

- participation in: Lecture	40 h
- participation in: Seminar	40 h
- participation in: Classes	80 h
- consultation	4 h
	Total: 164 h

2. Independent work of a student:

148.50 h

Total: 148.50 h

Total (contact hours + independent work of a student): 312.50 h

1 ECTS credit = 25-30 h of an average student's work, number of ECTS,

ECTS Points = 312.50 h: 25 h/ECTS = 12.50 ECTS

Average: 12.50 ECTS

- including the number of ECTS credits for contact hours with the direct participation of an academic

6.56 ECTS

- including the number of ECTS credits for hours of independent work of a student 5.94 ECTS