

# UNIVERSITY OF WARMIA AND MAZURY IN OLSZTYN

of Medicine

Course/module syllabus - part A

## ELECTIVE COURSE MICROSCOPIC DIFFERENTIAL DIAGNOSIS OF NORMAL AND PATHOLOGICAL CELLS AND TISSUES ELECTIVE COURSE MICROSCOPIC DIFFERENTIAL DIAGNOSIS OF NORMAL AND PATHOLOGICAL CELLS AND TISSUES

# 48SJ-MDD ECTS: 0.5 YEAR: 2020L

#### COURSE CONTENT CI ASSES

1.Structure of the bone marrow and lymphatic system. Hematopoiesis. Differentiation of white blood cells and erythrocytes, types of anemia. Myelopoiesis and lymphopoiesis and their disorders. 2. Morphology and function of epithelial tissues (skin, excretory system, gastrointestinal tract, exocrine and endocrine glands) 3. Normal and altered microarchitecture of the components of gastrointestinal tract, respiratory system and reproductive system. 4. Normal and disordered histology of the central and peripheral nervous system, muscular and circulatory system.

LECTURES

### EDUCATIONAL OBJECTIVE:

This course provided the medical student with the knowledge in histopathologic basis of diseases. This includes an introduction to the basic concepts of disease process, etiology, pathogenesis and relevant molecular biological and biochemical markers of diseases. The course include discussion of disease process of each system and is correlated with microscopic imaging of normal and pathologic tissues. This course provides a foundation of the fundamental concepts of the histological organization of the human body and promotes considering of the clinical consequences of cellular disorders and tissue-related diseases.

### DESCRIPTION OF LEARNING OUTCOMES FOR THE COURSE IN RELATION TO FIELD AND MAJOR LEARNING OUTCOMES

Codes of learning outcomes in a major field M/NM+++. of study: Codes of learning outcomes in a major area of study:

A.U1.+, A.U2.+, A.U5.+, A.W1.+, A.W2.+, A.W3.+, A.W4.+, A.W5.+, B.W21.+, B.W25.+, C.W.31.+, K.5+, K.7.+, K.8.+,

### LEARNING OUTCOMES:

### Knowledge

W1 - W1 - A.W1., A.W2., A.W3., A.W4., A.W5., B.W25., B.W21., C.W31.

Skills

U1 - A.U1., A.U2., A.U5.

Social competence

K1 - K.5, K.7., K.8.

### **BASIC LITERATURE**

1) Leslie P. Gartner and James L. Hiatt, Color Textbook of Histology, 3rd ed, wyd. Saunders Elsevier, 2007, t. 1, s. 503; 2) T. W. Sadler, Langman's Medical Embryology, 12th ed, wyd. Lippincott Williams & Wilkins, 2012, t. 1, s. 383; 3) Wolfgang Kuehnel, Color Atlas of Cytology, Histology, and Microscopic Anatomy, 4th edition, wyd. Thieme, 2003, t. 1, s. 544

### SUPPLEMENTARY LITERATURE

### Course/module:

Elective Course MICROSCOPIC DIFFERENTIAL DIAGNOSIS OF NORMAL AND PATHOLOGICAL CELLS AND TISSUES Fields of education:

Course status:	facultative
Course group:	B - przedmioty kierunkowe
ECTS code:	120SJ-3-B
Field of study:	Medicine
Specialty area:	Medicine
Educational profile:	General academic
Form of study:	full-time
Level of study:	uniform master's studies
Year/semester:	1/2

Year/semester:

Type of course:

Classes Number of hours per Classes: 20 semester/week:

### Teaching forms and methods

Classes(K1, U1, W1) : Multimedia presentations (PowerPoint presentation). Microscopic analysis of histolgical slides. Classes are carried out stationary or with remote learning platforms (MOODLE, MS TEAMS, CASE CENTER- virtual microscope)

### Form and terms of the verification results:

CLASSES: Competention test - CLASSES: The competention test - recognition of specific structures, tissues or organs by microscopic examination of histological slides (in a case of remote learning - using teaching platforms: MOODLE, MS TEAMS, CLICKMEETING, CASE CENTER - virtual microscope). To pass the practical test the percentage of correct answers must be 60% . (K1, U1, W1)

#### Number of ECTS 0.5 points:

Language of English instruction:

#### Introductory courses:

Histology, anatomy, physiology and cell biology

### Preliminary requirements:

Basic knowledge of human anatomy, histology, physiology and cell biology.

#### Name of the organizational unit offering the course:

Katedra Histologii i Embriologii Człowieka,

Person in charge of the course:

prof. dr hab. n. med. Zbigniew Kmieć,

#### Course coordinators:

dr Bartłomiei Kraziński, . dr inż. Agnieszka Śliwińska-Jewsiewicka, , dr hab. n. med. Anna Kowalczyk, prof. UWM

#### Notes:

Registration for classes is required.

# Detailed description of the awarded ECTS points - part B

# 48SJ-MDD ELECTIVE COURSE MICROSCOPIC DIFFERENTIAL DIAGNOSIS OF ECTS: 0,5 NORMAL AND PATHOLOGICAL CELLS AND TISSUES YEAR: 2020L ELECTIVE COURSE MICROSCOPIC DIFFERENTIAL DIAGNOSIS OF NORMAL AND PATHOLOGICAL CELLS AND TISSUES

The awarded number of ECTS points is composed of:

1. Contact hours with the academic teacher:

- participation in: classes	20 h.	
- consultation	2 h.	
2. Student's independent work:	22 h.	
- students should be prepared to actively participate in practical classes. students should be prepared for practical test (recognition of specific structures, tissues or organs by microscopic examination of histological slides). students get the feedback from their teacher on ms teams webinar. ask questions and discuss the problems with recognition of structures. use casecenter and/or provided microphotographs for review.	-9,5 h.	
	-9,5 h.	
1 ECTS point = 25-30 h of the average student's work, number of ECTS points = 12,5 h : 25 h/ECTS = 0,50 ECTS on average: <b>0,5 ECTS</b>		
<ul> <li>- including the number of ECTS points for contact hours with direct participation of the academic teacher:</li> <li>- including the number of ECTS points for hours completed in the form of the student's independent work:</li> </ul>	0,88 ECTS points, -0,38 ECTS points,	