



Summer Semester: 45h													
Direct (contact) education				15									
Online learning (synchronous)	15			15									
Online learning (asynchronous)													
TOTAL per year: 45 h													
Direct (contact) education				15									
Online learning (synchronous)	15			15									
Online learning (asynchronous)													
Educational objectives (max. 6 items)													
<p>C1. 1. To familiarize students with the range of issues dealt with in modern/contemporary pathology.</p> <p>C2. Understanding the mechanisms of developing of basic disease entities.</p> <p>C3. The ability to associate the clinical symptoms and conditions with the macro- and microscopic changes and features in cells, tissues and organs.</p> <p>C4. Knowledge of the principles of autopsy and sectional/dissection techniques.</p> <p>C5. The ability to interpret data from various sources, including pathology, for more effective diagnosis of diseases.</p> <p>C6. Study and understanding of the basis of the disorders treated in hospitals and outpatients clinics.</p>													
Education result matrix for module/course in relation to verification methods of the intended education result and the type of class													
Number of course education result	Number of major education result	Student who completes the module/course knows/is able to	Methods of verification of intended education results (forming and summarising)	Form of didactic class <i>**enter the abbreviation</i>									
W 01	C.W16.	knows the diagnostic methods used in pathomorphology and the role of laboratory methods in the prevention and diagnosis of organ ans systemic disorders	Two tests per semester for a class in the form of test questions.	L, MC, PCP									
	C.W17.	recognizes the signs of death and posthumous changes and knows the principles of corpse technique and autopsy											
	E.W1.	understands the relationship between morphological abnormalities and the function of changed organs and systems as well as clinical symptoms and possibilities of diagnostics and treatment											
	E.W2.	knows the basic methods of medical examination and the role of additional examinations in diagnosis, monitoring, prognosis and prevention of disorders organ and systemic, with particular emphasis on their impact on oral tissues											
	E.W3.	knows the etiopathogenesis and symptomatology of respiratory, circulatory,											



	E.W15. F.W5. G.W31. G.W32.	hematopoietic, genitourinary, immune, digestive and endocrine system, with particular emphasis on the disease whose symptoms occur in the oral cavity knows methods of cytological diagnostics and cytodiagnostic criteria in diagnosis and differentiation of cancer and nonneoplastic diseases knows the symptoms, course and procedures in certain diseases of the mouth, head and neck, taking into account age groups knows the rules of dealing with corpses knows the principles of keeping, storing and sharing medical records and protecting personal data of patients		
U 01	C.U6. D.U12. D.U15. D.U19. F.U5. F.U6. F.U13. F.U15. F.U16. G.U41.	describes pathological changes in cells, tissues and organs in the field of circulatory disorders, regressive changes, progressive changes and inflammations observes the patient's rights, including: the right to the protection of personal data, the right to privacy, the right to information about the state of health, the right to express informed consent to treatment or withdrawal from it, and the right to a dignified death uses and processes information using information technology and using contemporary sources of medical knowledge critically analyzes scientific literature and draws conclusions collects and protects biological and tissue material for diagnostic tests, including cytological tests interprets the results of additional tests and examinations maintains ongoing patient records, issues referrals for specialist dental and general medical examinations or treatment presents selected medical problems in oral or written form, in a manner adequate to the level of recipients describes pathological changes of cells, tissues and organs according to basic mechanisms evaluates posthumous changes (signs of death)		L, MC, PCP
K 01	K.01. K.02.	Recognizes own diagnostic and therapeutic restrictions, educational needs, plans educational activities Is able to work in a team of professionals in a multicultural and multinational environment		L, MC, PCP



	K.03.	Implements the principles of professional camaraderie and cooperation with representatives of other professions in the field of health protection		
	K.04.	Observes medical confidentiality and patient's rights		

** L - lecture; SE - seminar; AC – auditorium classes; MC – major classes (non-clinical); CC – clinical classes; LC – laboratory classes; SCM – specialist classes (magister studies); CSC – classes in simulated conditions; FLC – foreign language course; PCP practical classes with patient; PE – physical education (obligatory); VP – vocational practice; SS – self-study, EL – E-learning .

Please mark on scale 1-5 how the above effects place your classes in the following categories:
communication of knowledge, skills or forming attitudes:

Knowledge: 3

Skills: 2

Social competences: 1

Student's amount of work (balance of ECTS points)

Student's workload (class participation, activity, preparation, etc.)	Student Workload (h)
1. Contact hours:	15
2. Online learning hours (e-learning):	30
3. Student's own work (self-study):	30
Total student's workload	75
ECTS points for module/course	1
Comments	-

Content of classes (please enter topic words of specific classes divided into their didactic form and remember how it is translated to intended educational effects)

Lectures

1. General pathology, histopathological examination methods, autopsy rules.
2. Genetic, congenital and developmental defects.
3. Degenerations and regressive changes.
4. Hemodynamic disorders, thromboembolic disease and shock.
5. Acute and chronic inflammation.
6. Neoplasia: epidemiology, molecular basis of cancer, carcinogenic agents, characteristics of benign and malignant neoplasms, Grading and Staging of tumors, TNM Classification.
7. Neoplasia: epithelial and mesenchymal neoplasms.
8. Blood vessels and heart pathology.
9. Respiratory tract and pulmonary pathology.
10. Gastrointestinal tract pathology: esophagus, stomach, bowels, liver and pancreas.
11. Urinary tract and kidney pathology.
12. Female genital tract and breast pathology.
13. Male genital tract pathology.
14. Central nervous system pathology.
15. Endocrine and skin pathology.

Practical classes

1. Introduction to pathology: the organization of pathology department and histopathological laboratory, principles of taking and procurement of the histopathological/tissue material, method of research: proceedings of specimens, histochemical and immunohistochemical



2. Degenerations: basic definitions and classifications.
3. Adaptations, injury and death: apoptosis, necrosis and atrophy.
4. Circulatory disorders: thrombosis, DIC, ischemia, congestion, edema, hemorrhage, shock.
5. Inflammation: definition, causes, terminology, divisions, inflammation, acute and chronic.
6. Tumours: definition, division, tumor growth, the spread of cancer, metastatic disease.
7. Tumours of epithelial and mesenchymal origin.
8. Cardiovascular system.
9. Respiratory tract.
10. Male and female genital tract and breast.
11. Kidneys and urinary tract.
12. The central nervous system and peripheral nerves.
13. Hematopoietic system and endocrine system.
14. Musculo-skeletal system: bones, joints and muscles.
15. Pathology of the skin.

Basic literature (list according to importance, no more than 3 items)

1. Kumar V, Abbas A.K., Aster J.: Robbins Basic Pathology. 10th Edition; 2017.
2. Anderson: Pathology, part I and II, 1995-2000.
3. Stevens A, Lowe JS, Young B: Wheater's Basic Histopathology. A colour atlas & text; 2002.

Additional literature and other materials (no more than 3 items)

1. Lippincott's Illustrated Q&A Review of Rubin's Pathology, 2nd Edition; Lippincott's 2011.
2. Goljan E.F.: Rapid Review Pathology, 2ed, Mosby 2007.

Didactic resources requirements (e.g. laboratory, multimedia projector, other...)

1. Cytological and histopathological laboratory with equipment.
2. Dissecting and autopsy room with equipment.
3. Microscopes.
4. Seminar room and multimedia slide projector.

Preliminary conditions (minimum requirements to be met by the student before starting the module/course)

1. Knowledge of basic issues of normal and topographic human anatomy.
2. Knowledge of basic issues of human physiology and pathophysiology.
3. Knowledge of basic issues in human histology.

Conditions to receive credit for the course

The condition for passing the course is to obtain a positive assessment of the two tests in the form of test questions.

Grade:	Criteria (examination evaluation criteria)
Very Good (5.0)	90% positive answers
Good Plus (4.5)	85% positive answers
Good (4.0)	80% positive answers
Satisfactory Plus (3.5)	70% positive answers
Satisfactory (3.0)	60% positive answers
Unit realizing the subject	Department of Pathology and Oncological Cytology
Unit address	ul. Borowska 213, 50-556 Wrocław
Telephone	71 734 39 60
E-Mail	ws-13.1@umed.wroc.pl



Person responsible for module	Prof. dr hab. Agnieszka Hałoń
Coordinator	Prof. dr hab. Agnieszka Hałoń
Telephone	71 734 39 60
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List of persons conducting specific classes				
Full name	Full name	Full name	Full name	Full name
Agnieszka Hałoń	Agnieszka Hałoń	Agnieszka Hałoń	Agnieszka Hałoń	Agnieszka Hałoń
Paweł Gajdzis	Paweł Gajdzis	Paweł Gajdzis	Paweł Gajdzis	Paweł Gajdzis
Maciej Kaczorowski	Maciej Kaczorowski	Maciej Kaczorowski	Maciej Kaczorowski	Maciej Kaczorowski

Date of Syllabus development

25.09.2020

Syllabus developed by

Prof. dr hab. Agnieszka Hałoń

Signature of Head of teaching unit

Uniwersytet Medyczny we Wrocławiu
KATEDRA ORAZ ZAKŁAD
PATOMORFOLOGII I CYTOLOGII ONKOLOGICZNEJ
kierownik
.....
prof. dr hab. Agnieszka Hałoń

Signature of Faculty Dean

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