



Educational objectives (max. 6 items)

C1. Draw the attention of students who already have basic information in the field of "Histology with cytophysiology" to the possibility of practical application this knowledge.

C2. The combination of data on the structure and function of specific tissues and organs to their usage in diagnostic and therapeutic process.

C3. Gain the knowledge about the collection and protection of tissue material.

C4. Guide to basic methods of preparation of biological material.

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>
K01.	B.W25.	The student knows and understands the clinical implications resulting from the morphology and function of selected tissues and organs in internal medicine and surgical specialties.	Active participation in discussion	AC
K02.	B.W34.	The student knows and understands the methodology and the use of routine (e.g. hematoxylin and eosin staining, H&E) and specialized techniques (e.g. immunohistochemistry (IHC), immunofluorescence (IF), electron microscopy(ME)).	Active participation in discussion	AC
S01.	A.U2.	The student can distinguish in the microscopic evaluation, the basic types of tissues and determine whether their microarchitecture has correct character.	Individual oral answer (image analysis)	AC
S02.	A.U2.	The student can conduct a preliminary preparation of biological material for specific research methods.	Tissue samples preparation	AC
S03.	A.U2.	The student is able to properly collect material for basic and advanced morphological studies.	Tissue samples preparation	AC

** 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: 4

Skills: 2



Student's amount of work (balance of ECTS points) 1,5	
Student's workload (class participation, activity, preparation, etc.)	Student Workload (h)
1. Contact hours:	30
2. Student's own work (self-study):	9
Total student's workload	39
ECTS points for module/course	1,5
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:-----	
Seminars-----	
Practical classes Exercise 1- (3 hours). Organizational aspects. Discussion of basic and advanced research techniques. Rules for the proper preparation of biological material. Interpretation of the results obtained. Exercise 2- (3 hours). Histological overview of tissues and organs in terms of clinical application available techniques. Analysis of microscopic and digitized samples. Exercise 3- (3 hours). Histological overview of tissues and organs in terms of clinical application available techniques. Analysis of microscopic and digitized samples. Exercise 4- (3 hours). Histological basis of selected disease entities – lung cancer. Analysis of microscopic and digitalized samples. Exercise 5- (3 hours). Histological basis of selected disease entities – colorectal cancer. Analysis of microscopic and digitalized samples. Exercise 6- (3 hours). Histological basis of selected disease entities – breast cancer. Analysis of microscopic and digitalized samples. Exercise 7- (3 hours). Histological basis of selected disease entities – gynecological malignancies. Analysis of microscopic and digitalized samples. Exercise 8- (1.5 hour). Final test. Discussion of the results. Summary of the subject.	
Basic literature (list according to importance, no more than 3 items) 1. Wheater B. Young, J.S. Lowe, A. Stevens, J. W. Histology. Textbook and atlas. Elsevier, 2010. 2. V. Kumar, R. Cotran, S. Robbins. Pathology Robbins. Elsevier, 2005.	
Additional literature and other materials (no more than 3 items) 1. Anthony L. Mescher. Junqueira's Basic Histology: Text and Atlas, 15 th edition. MGH, 2018. 2. Stacey E. Milles. Histology for Pathologists. Lippincott Williams & Wilkins, 2007.	
Didactic resources requirements (e.g. laboratory, multimedia projector, other...) Classroom with a computer and multi-media projector and whiteboard with markers. Histology laboratory with equipment and reagents necessary for the preparation of biological material.	
Preliminary conditions (minimum requirements to be met by the student before starting the module/course)-----	
Conditions to receive credit for the course (specify the form, criteria and conditions of receiving credit for classes included in the module/course, admission terms to final theoretical or practical examination, its form	



and requirements to be met by the student to pass it and criteria for specific grades).

- Active participation in the discussion ending each exercise.
- Presence on all exercises. Each absence must be made up, including rector days and dean's hours – preparation of a presentation on a given topic.
- The subject ends with a test with grade. Test in the form of "fill in the gaps" for 100 missing words. Passing threshold at 60% of correct answers.

Grade:	Criteria for course
Very Good (5.0)	96 – 100 %
Good Plus (4.5)	86 – 95 %
Good (4.0)	76 – 85 %
Satisfactory Plus (3.5)	66 – 75 %
Satisfactory (3.0)	60 – 65 %

Name of unit teaching course:	Division of Histology and Embryology, Department of Human Morphology and Embryology
Address	Chalubinskiego 6a; 50-368 Wrocław
Phone	+48 71 784 1354 (office)
E-mail	an.kowalczyk@umed.wroc.pl

Person responsible for course:	Christopher Kobierzycki, MD, PhD
Phone	+48 71 784 13 59
E-mail	christopher.kobierzycki@umed.wroc.pl

List of persons conducting specific classes:	degree/scientific or professional title	Discipline	Performer profession	Form of classes
Christopher Kobierzycki	MD, PhD	Histology, Embryology, Obstetrics and Gynecology	Doctor, Academic	Auditorium classes

Date of Syllabus development
08/07/2019

Syllabus developed by
Christopher Kobierzycki, MD PhD

Christopher Kobierzycki
Signature of Head of teaching unit

Prof. Piotr Dziegiel, MD PhD

Uniwersytet Medyczny we Wrocławiu
ZAKŁAD HISTOLOGII I EMBRIOLOGII

Piotr Dziegiel
prof. dr hab. Piotr Dziegiel

Signature of Faculty Dean
VICE-DEAN FOR STUDIES
Prof. Andrzej Hendrich, PhD