



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> |
|-----------------------------------|----------------------------------|--|---|---|
| KO1. | 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 | LC |
| KO2. | B.W29. | 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 | LC |
| S01. | A.U2. | The student is able to properly collect material for basic and advanced morphological studies. | Active participation in discussion | LC |
| S02. | A.U2. | The student can conduct a preliminary preparation of biological material for specific research methods. | Active participation in discussion | LC |
| S03. | A.U2. | The student can distinguish in the microscopic evaluation, the basic types of tissues and determine whether their microarchitecture has correct character. | Active participation in discussion | LC |

**** 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**

Social competences: **2**



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|---|-----------------------------|
| 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 ----- | |
| <p>Practical classes</p> <p>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.</p> <p>Exercise 2 - (3 hours). Histological overview of tissues and organs in terms of clinical application available techniques. Analysis of microscopic and digitized samples.</p> <p>Exercise 3 - (3 hours). Histological overview of tissues and organs in terms of clinical application available techniques. Analysis of microscopic and digitized samples.</p> <p>Exercise 4 - (3 hours). Histological basis of selected disease entities – lung cancer. Analysis of microscopic and digitalized samples.</p> <p>Exercise 5 - (3 hours). Histological basis of selected disease entities – colorectal cancer. Analysis of microscopic and digitalized samples.</p> <p>Exercise 6 - (3 hours). Histological basis of selected disease entities – breast cancer. Analysis of microscopic and digitalized samples.</p> <p>Exercise 7 - (3 hours). Histological basis of selected disease entities – gynecological malignancies. Analysis of microscopic and digitalized samples.</p> <p>Exercise 8 - (1.5 hour). Final test. Discussion of the results. Summary of the subject.</p> | |
| Basic literature (list according to importance, no more than 3 items) | |
| <ol style="list-style-type: none"> 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) | |
| <ol style="list-style-type: none"> 1. Anthony L. Mescher. Junqueira's Basic Histology: Text and Atlas, 15th 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 % |

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|-------------------------------|---|
| 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 | justyna.kosek@umed.wroc.pl |

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|--------------------------------|--------------------------------------|
| 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

31/05/2020

Syllabus developed by

Christopher Kobierzycki, MD PhD

Signature of Head of teaching unit

Prof. Piotr Dziegiel, MD PhD

Uniwersytet Medyczny we Wrocławiu
ZAKŁAD HISTOLOGII I EMBRIOLOGII

prof. dr hab. Piotr Dziegiel

Signature of Faculty Dean

Wrocław Medical University
Faculty of Medicine
Vice-Dean for English Studies

prof. Beata Sobieszkańska, PhD