Lp.	Temat	Uwagi	Nr spotkania
1.	**Introduction to Histology:** What is histology? The importance of histology in medical education and its role in modern medicine. The relationship between histology and other branches of medical biology/medicine.	1h; online seminarium	
2.	**Histology Didactics:** How to study effectively. Methods of taking notes. Self-assessment and knowledge verification.	1h; online seminarium	1
3.	**Introduction to cell biology:** Cytology and cytophysiology as the language for describing histology. The eukaryotic cell as the building block of tissues and organs. Basics of cellular ultrastructure.	1h; online seminarium	
4.	**Basic Tissues: Epithelial Tissue:** Characteristics of the tissue. Histological structure of the tissue. Tissue classification. Occurrence.	1h; online seminarium	2
5.	**Basic Tissues: Connective Tissue:** Characteristics of the tissue. Histological structure of the tissue. Tissue classification. Occurrence.	1h; online seminarium	
6.	**Basic Tissues: Blood (including basic structure of blood vessels):** Characteristics of the tissue. Histological structure of the tissue. Occurrence. Basic wall components of blood vessels.	1h; online seminarium	3
7.	**Basic Tissues: Muscle Tissue:** Characteristics of the tissue. Histological structure of the tissue. Tissue classification. Occurrence.	1h; online seminarium	
8.	**Basic Tissues: Nervous Tissue:** Characteristics of the tissue. Histological structure of the tissue. Tissue classification. Occurrence.	1h; online seminarium	4
9.	**Summary of Basic Tissues Knowledge:** Solving cases and tasks.	2h; stacjonarnie ćwiczenia	5
10.	**Histological Analysis of an Organ:** Analysis of the skin in terms of the organ's histological structure and the functions of basic tissues.	2h; stacjonarna ćwiczenia	
11.	**Preparation of a Histological Slide**	2h; stacjonarne ćwiczenia	6
	Suma godzin	**14**	

Syllabus	
Name of department / clinic providing the course:	Department of Histology and Embryology
Course profile:	Academic
Speciality:	
Level of course unit:	
Course unit title:	Introduction to histology
Course language:	English
Course aims:	

The course is designed to provide a comprehensive introduction to histology, encompassing its definition, scope, and interrelations with both preclinical and clinical disciplines, as well as its significance in the context of medical practice. Participants will be acquainted with fundamental methodologies and techniques applied in histological learning. The curriculum will cover the principal tissue types of the human body, with particular emphasis on their cellular and structural organization, mutual interactions, and their contribution to the integrated functioning of the organism as a whole. The course aims to facilitate the systematic consolidation of students' prior knowledge while addressing potential gaps in their understanding of fundamental histological concepts.	
Form of study:	Premed
Year of study:	1
Types of educational activities and number of hours allocated (lectures, small-group sessions, seminar-group sessions, clinical-group sessions):	
Laboratory: 6h Seminar: 8h	
Number of ECTS credits allocated and their structure according to students' from of learning (based on the workload needed to achieve the course outcomes, both with respect to classes requiring the direct participation of the academic staff eg. lectures, practical classes, laboratory work and electives, as well as self-directed learning):	
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Names of course unit's faculty:	
Rafał Tomasz Szymański, MSc; Ewa Lewandowska, PhD; Dominika Danowska – Klonowska, PhD; Aleksandra Fortuniak D.M.D. PhD;	
Prerequisites (eg. previous courses or particular educational outcomes from previous courses):	
Basic information on cell and tissue biology at the high school level/ secondary school level	
Learning activities and teaching methods: (lecture, discussion, multimedia based learning, demonstration, PBL etc.):	
Teaching methods: verbal instruction, multimedia presentation, discussion, demonstration of tissues and organs using the Olyvia digital slide software, solving tasks and clinical cases, working with a microscope micropictures.	
Course unit content: (detailed description of the lectures', classes', lab's etc. content):	
Seminar 1 online **Introduction to Histology:** What is histology? The importance of histology in medical education and its role in modern medicine. The relationship between histology and other branches of medical biology/medicine. **Histology Didactics:** How to study effectively. Methods of taking notes. Self-assessment and knowledge verification. Seminar 2 online **Introduction to cell biology:** Cytology and cytophysiology as the language for describing histology. The eukaryotic cell as the building block of tissues and organs. Basics of cellular ultrastructure. **Basic Tissues: Epithelial Tissue:** Characteristics of the tissue. Histological structure of the tissue. Tissue classification. Occurrence. Seminar 3 online **Basic Tissues: Connective Tissue:** Characteristics of the tissue. Histological structure of the tissue. Tissue classification. Occurrence. **Basic Tissues: Blood (including basic structure of blood vessels):** Characteristics of the tissue. Histological structure of the tissue. Occurrence. Basic wall components of blood vessels. Seminar 4 online	

Basic Tissues: Muscle Tissue: Characteristics of the tissue. Histological structure of the tissue. Tissue classification. Occurrence.

Basic Tissues: Nervous Tissue: Characteristics of the tissue. Histological structure of the tissue. Tissue classification. Occurrence.

Laboratory 1:

Summary of Basic Tissues Knowledge: Solving cases and tasks.

Laboratory 2:

Histological Analysis of an Organ: Analysis of the skin in terms of the organ's histological structure and the functions of basic tissues.

Laboratory 3:

Preparation of a Histological Slide

Course objectives (description of course unit's educational outcomes divided into factual knowledge, practical skills and attitudes/ generic competencies. Attitudes / generic competencies include social skills: eg. the ability to teach others, communication skills, the ability to set priorities, to solve problems, preparation for life-long learning, the ability to work with others as both the member and the leader of a team as well as the other components of professionalism)

Knowledge:

A.W1 – the structure of the human body in topographic and functional terms, including topographic relationships between individual organs, along with anatomical, histological, and embryological terminology. [Partially implemented]

A.W2 – cellular structures and their functional specializations.

A.W3 – the microarchitecture of tissues, the extracellular matrix, and organs.

B.W16 – mechanisms of communication between cells and between a cell and the extracellular matrix, as well as intracellular signal transduction pathways, including examples of disruptions in these processes leading to the development of cancers and other diseases; [Partially implemented]

B.W20 – the function and regulatory mechanisms of all organs and systems of the human body, as well as the interrelationships between them; [Partially implemented]

Skills:

A.U2 – to recognize structures corresponding to organs, tissues, cells, and cellular components in microscopic images; to describe and interpret their structure and the relationship between structure and function. [Partially implemented]

B.U11 – to plan and conduct scientific research, interpret results, and formulate conclusions; [Partially implemented]

Attitudes and transferrable (generic) competencies:

P7S_KR I recognizing and identifying one's own limitations, performing self-assessment of deficits and educational needs

P7S_KK I using objective sources of information

P7S_KK I drawing conclusions based on one's own measurements or observations

P7S_KR I implementing the principles of professional collegiality and teamwork, including cooperation with representatives of other medical professions, also in multicultural and multinational environments

P7S_KO I assuming responsibility for decisions made in professional practice, including in terms of personal and others' safety

Required learning resources (readings):

Anthony L. Mescher: Junqueira's Basic Histology. Text and Atlas. 15th Ed. 2018 McGrow-Hill Companies.

Recommended learning resources (readings):

V.P. Eroschenko. Atlas of Histology with Functional Correlations. 13th Ed. 2017 Lippincott Williams and Wilkins.

Assessment methods and criteria:

Attendance at all seminars and classes is mandatory and constitutes one of the essential requirements for a student to be admitted to the final assessment. Being late for classes by more than 15 minutes may result in failing the class. The rules for making up excused absences will be discussed in a separate section.

During seminars and classes, students work under the supervision of the teaching assistants leading the course. At the end of the seminars and classes, the assistants evaluate the students' engagement during the activities. The evaluation may cover: student's notes taken during the classes, participation in discussions and group work, as well as responses on worksheets and clinical cases. If the assistant has no concerns regarding the student's work, the student is granted credit for the class. In the event of not receiving credit, the student must individually arrange with the course coordinator how to obtain it.

A prerequisite for admission to the final assessment is attendance at all classes and successful completion of all course requirements. The final assessment takes place during the summer examination session and is conducted in the form of a multiple-choice test consisting of 40 questions (MCQ, with a single correct answer). Some questions may include microphotographs of tissues. Depending on the number of students retaking the second and third attempts, and at the discretion of the course coordinator, the assessment may take the same form as the first attempt or take the form of a written examination (comprising both short-answer and long-answer questions). For preparation, students will be provided with the course materials used during classes. The final grade is computed by the following method: less than 60% - 2 (failed); no less than 60% - 3 (sufficient); no less than 68 % - 3,5 (satisfactory); no less than 77% - 4 (good); no less than 85% - 4,5 (very good); no less than 93% - 5 (excellent). Failure to obtain a passing grade in all available examination attempts is equivalent to failing the course.

Rules for making up absences from classes:

In the event of a student's absence from classes, a medical certificate justifying the absence must be submitted to the Dean's Office. Upon completion of the period of medical leave, the student is required to contact the course coordinator in order to individually arrange the date and conditions for making up the missed classes.

Additional information:

Seminars will be held online via the MS Teams platform on a dedicated channel. Laboratories will be conducted in person at the Department of Histology and Embryology premises.

In situations not specified in this document, the Regulations of Studies and/or decisions made by the course coordinator on an ongoing basis shall apply.

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