

**2022/2023. ACADEMIC YEAR
PROGRAM OF STUDY (For students of 1st year)**

Full name of the subject: ANATOMY
Program: undivided program (pharmaceutical)
Schedule: full-time
Short name of the subject: Anatomy
English name of the subject: Anatomy
German name of the subject: Grundlagen der Anatomie
Neptun code of the subject: GYKANT272E1A
Type of registration: obligatory/obligatory elective/elective/criteria requirement
Responsible department: Department of Anatomy, Histology and Embryology of Semmelweis University

Responsible tutor: Dr. Ágnes Csáki Contact information: - telephone: 215 6920 / 53652 ext., - email: csaki.agnes@med.semmelweis-univ.hu	Title, academic degree: associated professor, Ph.D.
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Name of the persons responsible for the teaching of the subject: Dr. Herberth-Minkó Krisztina Szászné Dr. Kocsis Katalin Dr. Puskár Zita	Title, academic degree: assistant professor, Ph.D. assistant professor, Ph.D. senior research fellow, Ph.D.
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Classes per week: <div style="text-align: right;">2 lecture(s) 2 practice(s)</div>	Credit point(s): <div style="text-align: right;">2</div>
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Professional content, intent of acquirement and it's function in order to implement the goals of the program:
 Course principles:
 Principles:
 - to teach the terminology of the human anatomy to the future pharmacists
 - to discuss those special anatomical and physiological conditions which may influence the therapeutical considerations;
 - to discuss those anatomical conditions, which are necessary for the understanding of the further medical subjects of the pharmacists' studies;
 - to teach the terminology (Latin and English) of human body parts (at a gross and microscopical anatomical level) necessary for the understanding of the medical language during the communication between the pharmacists and the doctors.
 Special attention is required concerning the anatomy of the central nervous system and the digestive tract, the absorption of medicines and their mechanism of action.

Short description of the subject:
 The lectures include all topics of anatomy, histology and embryology. Locomotor system, internal organs, nervous system, general and detailed histology, general embryology and development of organs are the topics of the lectures.

Course data

Recommen- ded term	Contact hours (lecture)	Contact hours (practice)	Contact hours (seminar)	Individual lectures	Total number of contact hours/semes- ter	Normal course offer	Consultations
2	28	28			56	Autumn semester* <u>Spring semester*</u> Both semesters* (* Please underline)	

Program of semester

Topics of theoretical classes (pro week):

- 1st week: 1. Introduction, Locomotor System
2. Skull, vertebral column, head, neck muscles
- 2nd week: 3. Basic tissues I.
4. Basic tissues II., Skin
- 3rd week: 5. The Immune System, the Lymphoid Organs
6. Blood, hematopoiesis
- 4th week: 7. Heart, the Vascular System
8. The Respiratory System, the Mechanics of Breathing
- 5th week: 9. The Digestive System I, abdominal cavity
10. The Digestive System II
- 6th week: 11. The Liver, the Pancreas
12. Peritoneum, abdominal cavity
- 7th week: 13. The Kidneys and the Urinary tract I.
14. The Kidneys and the Urinary tract II.
- 8th week: 15. The Female Reproductive Organs, cycle
16. The Male Reproductive Organs, Pelvis
- 9th week: 17. Nervous System introduction (synapses, neurotransmitters) Spinal cord, spinal nerves
18. Central Nervous System, meninges, blood supply, CSF, Encephalon, Spinal cord, Spinal nerves
- 10th week: 19. Motor system, Sensory system, Limbic system
20. Cranial nerves, The Autonomic Nervous System
- 11th week: 21. The Eyeball and Visual system
22. The Organ of Hearing and Equilibrium.
- 12th week: 23. Hypothalamus, the Endocrine Organs I
24. The Endocrine Organs II
- 13th week: 25. Germ cells, Fertilization, Development of the fetus, Placenta,
26. Teratology
- 14th week: 27. Development of the Digestive System and Reproductive organs
28. Malformations

Topics of practical classes (pro week):

- 1st week: introduction, upper and lower limbs
- 2nd week: basic tissues, skin
- 3rd week: skull, vertebral column, head, neck muscles
- 4th week: histology of the blood, vessels and the lymphoid organs
- 5th week: respiratory tract, thoracic cavity, heart, large vessels
- 6th week: respiratory tract histology, gastrointestinal tract histology
- 7th week: gastrointestinal tract, abdominal cavity
- 8th week: kidney and urinary tract histology, genital organs histology
- 9th week: urogenital system, pelvis
- 10th week: 1st Midterm- locomotor system, internal organs (not obligatory), nervous system histology
- 11th week: sensory organs histology
- 12th week: nervous system: brain, spinal cord, cranial nerves, spinal nerves, main vessels and nerves on limbs, sensory organs
- 13th week: endocrine organs, placenta
- 14th week: 2nd Midterm - nervous system, endocrine organs, general embryology (not obligatory), revision

Schedule of consultations: -

Course requirements

Prerequisites:

Biology I., (GYKGEN109E1A)
Medical Terminology (GYKNYE111G1A)

Conditions of attending the classes, amount of acceptable absents, way of presentation of leave, opportunity for makeup:

Attendance of a minimum of 75% of practices is necessary for the end-term signatures. There is no makeup opportunity.

Number, topics and dates of tests during the semester, opportunities of makeup and improvement of results:

Exam: In the end of the semester written semi-final exam defines the exam grade. The exam is electronic, via the Moodle system, including multiple choice question types, and "drag and drop" question types (requiring identification). In the case of the written (electronic Moodle) test, 50% of the maximum score available must be achieved for a successful (at least satisfactory grade) test result. The written test consists of two main parts: 75% of the questions are from topics belonging to "locomotor system, internal organs", 25% of the questions are from the topics of "nervous system, sensory organs, endocrine organs, general embryology".

Midterms: 10th week and 14th week Midterms are "non-compulsory assessment", from the topics "locomotor system, internal organs" and "nervous system, sensory organs, endocrine organs, general embryology", respectively. Its form is identical with the one of the semifinal exam (electronic, Moodle test). Successful (at least 50%) midterm provides the student with the exemption of the corresponding part of the examination, and if accepted, it is counted into the result of the semifinal exam.

The Midterms are not obligatory, there is no make-up possibility.

Requirements of signature:

Attendance of a minimum of 75% of the lectures and a minimum of 75% of the practices is necessary for the end-term signature. There is no make-up possibility.

Number and type of projects students have to perform independently during the semester and their deadlines: -

Type of the semester-end examination: signature/practical grade/semi-final/final

Form of the semester-end examination:

In the end of the semester written semi-final exam defines the exam grade. The exam is electronic, via the Moodle system, including multiple choice question types, and "drag and drop" question types (requiring identification). In the case of the written (electronic Moodle) test, 50% of the maximum score available must be achieved for a successful (at least satisfactory grade) test result. In the end of the exam the students might review their tests and their correct and incorrect answers.

Prescribed practices outside of the university: -**Scientific, course related researches, publications, essays:****List of teaching material:**

Faller, A, Schuenke, M.: The Human Body: An Introduction to Structure and Function (Flexibook) 2004., Thieme, Stuttgart.

Necessary equipment: Lecture hall for the lectures. For the practices dissection practical room and histology practical laboratory, with the appropriate devices.

The course description was prepared by: Dr. Csáki Ágnes, Dr. Kocsis Katalin