

**2024/2025. ACADEMIC YEAR**

**PROGRAM OF STUDY (FOR STUDENTS OF 3RD YEAR)**

<b>Full (Hun) name of the subject: Kórtani és klinikai alapismeretek (elmélet+gyakorlat) I.</b>							
<b>Program: Undivided program (pharmaceutical)</b>							
<b>Schedule: full-time</b>							
<b>Short name of the subject: Pathophysiology I.</b>							
<b>English name of the subject: Basic Medical Pathophysiology (theory+practice) I.</b>							
<b>German name of the subject: Grundlagen der Pathophysiologie (Vorlesung+Praktikum) I</b>							
<b>Type of registration: obligatory/obligatory elective/elective/criteria requirement</b>							
<b>Neptun code of the subject: GYKGYH128G1A</b>							
<b>Responsible Department: Semmelweis University, Department of Pharmacodynamics</b>							
<b>Responsible tutor</b> Gabriella Juhász, MD				<b>Title, academic degree:</b> associate professor, DSc			
<b>Contact information:</b> - phone: +36-1-210-29-30/56362 - email: <a href="mailto:juhasz.gabriella@semmelweis.hu">juhasz.gabriella@semmelweis.hu</a>							
<b>Name of the persons responsible for the teaching of the subject:</b> Gabriella Juhász, MD Kornélia Tekes, PharmD Ervin Finta, MD Noémi Papp, PharmD Kinga Gecse, PharmD				<b>Title, academic degree:</b> associate professor, DSc university professor, DSc head physician, PhD resident lecturer, PhD pharmacist, assistant lecturer			
<b>Class per week: 2 hours lectures</b> <b>1 hour practice</b>				<b>Credit point(s): 2 credits</b>			
<b>Professional content, intent of acquirement and it's function in order to implement the goals of the program:</b> The goal of the subject is to provide pathophysiological background to understand the mechanism of action of drugs, to prepare pharmacists for professional advising and for the collaboration with other health professionals.							
<b>Short description of the subject:</b> Basic medical pathophysiology focuses on common disorders, especially those ones that can be important for pharmacists during their work. The students learn about the epidemiology of common disorders, pathophysiological mechanisms that can lead to them, acquire knowledge about the main clinical symptoms and the basic therapeutic considerations. The subject has special emphasis on tasks that pharmacists may carry out as healthcare professionals, for example identification of symptoms that require urgent medical help or providing advice for the patients regarding their pharmacological treatment. During the practicals, students deepen their knowledge by working on clinical cases and solving tests.							
<b>Course data</b>							
Recommend ed term	Contact hours (lecture)	Contact hours (practice)	Contact hours (seminar)	Individu al lectures	Total number of contact hours/sem ester	Normal course offer	Consult ations
5th semester	28	14			42	<u>Autumn semester*</u> Spring semester Both semesters (* Please underline)	

## **Program of semester\*\***

### **Topics of theoretical classes (pro week):**

- 1. week:** Fundamental pathological processes, ageing
- 2. week:** Inflammation, tissue repair, pain, edema
- 3. week:** Disorders of erythropoiesis and haemostasis
- 4. week:** Peripheral vascular diseases
- 5. week:** Atherosclerosis, hypertension, stroke
- 6. week:** Ischaemic heart disease, arrhythmias
- 7. week:** Heart failure, circulatory shock, inflammatory diseases of the heart
- 8. week:** Gastrointestinal diseases I.
- 9. week:** Gastrointestinal diseases II.
- 10. week:** Gastrointestinal diseases III.
- 11. week:** Genitourinary diseases
- 12. week:** Ophthalmologic diseases
- 13. week:** Dermatologic diseases
- 14. week:** Disorders caused by physical effects

### **Topics of practical classes (pro week):**

- 1. week:** Medical documentation: medical summaries and letters
- 2. week:** Case reports: inflammation, tissue damage
- 3. week:** Case reports: disorders of erythropoiesis and haemostasis
- 4. week:** *Written test exam on Moodle system*
- 5. week:** Case reports: peripheral vascular diseases
- 6. week:** Case reports: cardiovascular diseases I.
- 7. week:** Case reports: cardiovascular diseases II.
- 8. week:** *Written test exam on Moodle system*
- 9. week:** Case reports: gastrointestinal diseases I.
- 10. week:** Case reports: gastrointestinal diseases II.
- 11. week:** Case reports: genitourinary diseases
- 12. week:** *Written test exam on Moodle system*
- 13. week:** Case reports: dermatologic diseases
- 14. week:** Group work

### **Other subjects (both compulsory and optional) relating to the transversal issues of the subject. Possible overlaps between subjects:**

The subject of Basic Medical Pathophysiology builds on the basic biomedical subjects such as Biochemistry and Physiology and prepares the students for the subjects Pharmacology and Toxicology and Pharmacotherapy.

**Schedule of consultations:** for personal request during practicals.

### **Course requirements**

#### **Prerequisites:**

Successful exam in:  
Physiology II.  
Biochemistry II.  
First Aid

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

Attendance at lectures and practicals will be checked in accordance with the current Study and Examination Regulations. Under the current regulations, students are allowed to miss a maximum of 25% (3 times) of the practicals. It is only possible to make up for absences from practicals with an official certificate, and at a time agreed with the tutors. Participation in the practicals is conditional on reading the lecture materials.

**The grading method; the conditions for getting the signature; the number, topic(s) and date(s) of the mid-term assessments, (reports, term tests), and the process in which they contribute to the final grade; and the possibility of their retake or their upgrading retake (as provided in §§ 25-28 of the STUDY AND EXAMINATION REGULATIONS):**

The practical grade is calculated from two elements: written test exams and group work.

1. Three written test exams will be completed by students during the semester, on Moodle, in weeks 4, 8 and 12. The first test will cover the material from weeks 1-3, the second test will cover the material from weeks 4-7 and the third test will cover the material from weeks 8-11. A maximum of 3x30 points can be achieved for the tests. Students will have the opportunity to retake the tests in the week following the test, at an agreed time outside the practical.

Missing or unsuccessful tests can also be retaken on the first week of the examination period in the form of a written test exam covering the entire course content of the semester.

A minimum grade of satisfactory is required for each of the three written tests during the semester for the end-of-semester signature.

2. The topics for the group work will be given to the students in the 9th week of the practical course. Each member of the group should take an equal part in the preparation and presentation of the case. Each member of the group will receive the same score (0-10) for the presentation. Exceptions to this may be made if a student's performance is extremely different from the rest of the group (e.g. inactivity, not participating in the presentation) - in which case he/she may receive a different score from the rest of the group.

Practical grade calculation:

90-100 points (5)

80-89 points (4)

70-79 points (3)

50-69 points (2)

In addition, at the beginning of the practicals, students will take warm-up tests on Moodle from the material of the weekly lecture. A minimum of 50% of the points must be obtained on each warm-up test to pass. For a maximum of 5 warm-up tests can be retaken in the last week of the semester at an agreed time. Passing the small tests is a prerequisite for the end-of-semester signature.

**Requirements of signature(as provided for in STUDY AND EXAMINATION REGULATIONS § 29):**

1. Attendance of lectures and practicals in accordance with the current Study and Examination Regulations. If a student has more practical absences than the number of practical absences described in the regulations, the semester grade will be "fail" and no practical grade will be given.

2. A grade of at least "pass" in each of the three written tests during the semester.

3. Pass all the warm-up tests

4. A passing grade (5-10 points) on the group work.

**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\*/ comprehensive examination\*/final/end-term examination\*

**Examination requirements:** as published by the education-research department on the MOODLE interface by the start of the academic term.

**Form of the semester-end examination:** written\*/oral\*/combined examination/practical examination/the assessment of completing project work (according to STUDY AND EXAMINATION REGULATIONS 30.§)\* (*Please underline*)

**The possibility and conditions for offering grades:**

**A list of the basic notes, textbooks, resources and literature that can be used to acquire the knowledge necessary to master the curriculum and to complete the assessments, with exact description about which of them is required to acquire which part of the syllabus (e.g. description based on topics), as well as the main technical and other aids and study aids that can be used:**

Lecture slides and practice slides will be provided on Moodle to help students learn the course material. These form the basis for the assessments. In addition, the Moodle system contains other supplementary materials (e.g. schedules of lectures and practicals, information on written tests) to help students prepare for the course.

Recommended literature, the relevant parts of which are referred to in lectures and exercises:  
Hammer-McPhee: Pathophysiology of Disease (McGraw-Hill, 2018)  
Kumar-Abbas-Aster: Robbins Basic Pathology (Elsevier, 2017)

**In the case of a subject lasting more than one semester, the position of the teaching/research department on the possibility of parallel enrolment and the conditions for admission\*\*\*\*:**

yes\*/no\*/on and individual assesment basis\*/not relevant\* (\* Please underline)

**The course description was prepared by::**

Gabriella Juhász  
associate professor and tutor

**\*\* A tantárgy tematikáját oly módon kell meghatározni, hogy az lehetővé tegye más intézményben a kreditismerési döntéshozatalt, tartalmazza a megszerzendő ismeretek, elsajátítandó alkalmazási (rész)kézségek, (rész)kompetenciák és attitűdök leírását, reflektálva a szak képzési és kimeneti követelményeire.**