

STUDY REQUIREMENTS

Semmelweis University, Faculty of Medicine Department of Pharmacology and Pharmacotherapy
Name of the subject: Clinical Pharmacology Credits: 3 Total number of hours: 35 lectures: 0 practices: 35 Type of the course (mandatory/elective): mandatory
Academic year: 2022/2023
Code of the course¹: AOKFRM753_1A
Course director (tutor): Dr. Ferdinandy, Péter Contact details: Department of Pharmacology and Pharmacotherapy, 1089 Budapest, Nagyvárad tér 4. Tel: +36-1-2104416, e-mail: ferdinandy.peter@med.semmelweis-univ.hu Position: Head of Department, full professor Date of habilitation and reference number: June 2 2001., 26/2001 Hab.
Aim of the subject and its place in the curriculum: Clinical Pharmacology is based on the knowledge of the subject Pharmacology taught in the 3rd year. In the teaching of clinical pharmacology, we assign drugs to the given disorders and present clinical cases. Based on students' active teamwork and problem-oriented thinking, we teach therapeutic strategies for priority diseases of public health importance according to current guidelines, as well as practical skills in clinical trials and pharmacovigilance. We cover the development of drugs and medical devices used in clinical practice, including clinical trials, and the continuous evaluation of their efficacy and safety during their use (pharmacovigilance - reporting of side effects). Furthermore, during the practical teaching of the prescription writing, students will master the practical application and legal background of prescribing medicines. Part of the subject is clinical toxicology, which describes the symptomatology and therapy of major poisonings and drug overdoses.
Location of the course (lecture hall, practice room, etc.): Nagyvárad téri Elméleti Tömb, 1089 Budapest, Nagyvárad tér 4.
Competencies gained upon the successful completion of the subject: Students will learn: <ul style="list-style-type: none">• a pharmacotherapeutic strategy for diseases of public health importance according to current guidelines• the practical application and legal background of prescription writing in connection with disorders• therapy for major poisonings and drug overdoses• the most common drug interactions• the process of drug development, especially in clinical trials• and be able to use the side effect reporting method• the basics of personalized pharmacotherapy and the digital therapy systems that support it.

Prerequisite(s) for admission to the subject:**Pharmacology (AOKFRM678_2A)****Minimum and maximum number of students registering for the course:** Since it is a mandatory subject all the students in the fourth year of medical education must register.**Student selection method in case of oversubscription:**

N/A

How to register for the course:**Through the NEPTUN system****Detailed thematic of the course²:****In a block system of 5 days, divided into two weeks, 7 hours of practice per day:**

All relevant topics are developed with the involvement of clinical experts. The clinical cases prepared in this way (3-5 cases per topic) are presented and processed in an interactive way on a problem-oriented basis. Related to the above is a description of current therapeutic recommendations.

Day 1:

Infectious Diseases Treatment Strategy - Dr. Kornél Király, Ph.D., Assistant Professor, Dr. Erzsébet Kató, Ph.D., Assistant Professor, Dr. Zsófia Gulyás-Onódi Ph.D., Assistant Professor
Treatment strategy for respiratory and gastrointestinal diseases - Dr. Klára Gyires, Ph.D., D.Sc., Professor Emeritus, Clinical Pharmacologist, Dr. Zoltán Zádori, Ph.D., Associate Professor

Day 2:

Endocrine Disease Treatment Strategy - Dr. Gábor Brenner, Ph.D., associate professor, Dr. Júlia Timár, Ph.D., retired associate professor
Treatment strategy for cardiovascular diseases and metabolic syndrome - Dr. Péter Ferdinandy, Ph.D., D.Sc., MBA, professor, clinical pharmacologist, Dr. Anikó Görbe, Ph.D., associate professor, specialist in clinical laboratory tests, Specialist in Psychotherapy, Dr. Zoltán Varga, Ph.D., Senior Research Fellow

Day 3:

Clinical trials and drug registration - Dr. Zoltán Giricz, Ph.D., Senior Research Fellow, Pharmacist, Dr. Pál Riba, Ph.D., Associate Professor
Basics of Drug Development - Dr. Péter Ferdinandy, Ph.D., D.Sc., MBA, Clinical Pharmacologist, Dr. Zoltán Giricz, Ph.D., Senior Research Fellow, Pharmacist
Pharmacovigilance, recognition of adverse drug reactions in clinical practice. - Dr. Péter Ferdinandy, Ph.D., D.Sc., MBA, professor, specialist in clinical pharmacology, Dr. Anikó Görbe, Ph.D., associate professor, specialist in clinical laboratory tests, specialist in psychotherapy
Clinical Addiction- Dr. Erzsébet Kató, Ph.D., Assistant Professor, Dr. Júlia Timár, Ph.D., Retired Associate Professor

Day 4:

Strategy for the treatment of psychiatric and neurological diseases - Dr. István Gyertyán, Ph.D., Research associate, Dr. László Hársing, Ph.D., D.Sc., retired professor, Dr. Ildikó Miklya, Ph.D., associate professor,
Treatment strategy of autoimmune diseases - Dr. Klára Gyires, Ph.D., D.Sc., professor emeritus, specialist in clinical pharmacology, Dr. Zoltán Zádori, Ph.D., associate professor

Clinical Toxicology, Emergency Medicine - Dr. Erzsébet Kató, Ph.D., Assistant Professor, Dr. Júlia Timár, Ph.D., Retired Associate Professor

Day 5:

Pharmaceutical Formulations and Prescriptions - Dr. Al-Khrasani Mahmoud, Ph.D., Associate Professor, Specialist Pharmacist in Drug Supply and Pharmaceutical Organization, Dr. Tóth Viktória, Ph.D., Research Associate

Individualized pharmacotherapy, special patient populations - Dr. Ildikó Miklya, Ph.D., associate professor, Dr. Zsófia Gulyás-Onódi PhD., Assistant Professor

Pain Relief - Dr. Pál Riba, Ph.D., Associate Professor, Dr. Al-Khrasani Mahmoud, Ph.D., Associate Professor, Pharmacist in Drug Supply and Organization

Potential overlap(s) with other subjects:

Internal medicine, cardiology, pulmonology, neurology, psychiatry, pediatrics, infectology, immunology, oncology

Special training activities required³:

Active participation in small groups solving practical tasks

Policy regarding the attendance and making up absences:

Maximum number of absences is 25 percent of the number of practices in the semester. In the case of absence the student can attend another block class later during the semester.

Means of assessing the students' progress during the semester⁴:

N/A.

Requirement for acknowledging the semester (signature):

The number of absences must not be more than 25 percent of the number of practices in the semester.

Type of the examination:

written multiple choice test, evaluation with the five mark scale (excellent=5, good=4, intermediate=3, pass=2, failure=1)

Exam requirements⁵:

A home-solved test of drug development prior to the exam. At the exam: answering problem-oriented competence tasks with test questions compiled from the topics listed above.

Type and method of grading⁶:

Based on the results at the exam: Drug development test: 20%, Written test: 80% of the total score.

How to register for the exam:

Registration must be done through the NEPTUN system for the days set by the department up to the limits.

Opportunities to retake the exam:

According to the Study and Examination Policy of Semmelweis University

Literature, i.e. printed, electronic and online notes, textbooks, tutorials (URL for online material):

Basic and Clinical Pharmacology (Ed. B. G. Katzung), 15th edition, McGraw-Hill Education, 2021.
ISBN 978-1 260 45231 0

Materials discussed during practices: <http://semmelweis.hu/pharmacology>, Moodle
(<https://itc.semmelweis.hu>)

Signature of the tutor:

Signature(s) of the head(s) of the Institute(s):

Date:

Credit Transfer Committee's opinion:

Comment of the Dean's Office:

Signature of the Dean:

¹ Dékáni Hivatal tölti ki, jóváhagyást követően.

² Az elméleti és gyakorlati oktatást órákra (hetekre) lebontva, sorszámozva külön-külön kell megadni, az előadók és a gyakorlati oktatók nevének feltüntetésével. Mellékletben nem csatolható!

³ Pl. terepgyakorlat, kórlapelemzés, felmérés készítése stb.

⁴ Pl. házi feladat, beszámoló, zárthelyi stb. témaköre és időpontja, pótlásuk és javításuk lehetősége.

⁵ Elméleti vizsga esetén kérjük a tételsor megadását, gyakorlati vizsga esetén a vizsgáztatás témakörét és módját.

⁶ Az elméleti és gyakorlati vizsga beszámításának módja. Az évközi számonkérések eredményeink beszámítási módja.