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MEDICAL UNIVERSITY PLOVDIV, PHARMACY FACULTY
DEPT. PHARMACOLOGY, TOXICOLOGY AND PHARMACOTHERAPY,
Tel.032/602 498, 15A "V. Aprilov" Blvd
HEAD OF DEPARTMENT: ASSOC. PROF. E. APOSTOLOVA, PhD

**PROGRAMME FOR PHARMACOKINETICS, PHARMACY STUDENTS – PRACTICALS,
SUMMER SEMESTER – ACADEMIC YEAR 2024/2025**

№	DATE	TOPIC	HOURS
1.	10 – 21. 02.2025	Basic concepts in pharmacokinetics. Pharmacokinetic parameters. Factors affecting absorption and elimination processes. Binding to plasma proteins. Pharmaceutical availability. Bioavailability - methods of determination. Bioequivalence. Chemical, biological, and therapeutic equivalents.	2 h.
2.	24.02 – 07. 03. 2025	Dosage regimen adjustments in kidney and liver failure. Solving cases from clinical practice.	2 h.
3.	10 – 21. 03.2025	Dosing in infants and children. Solving cases from clinical practice.	2 h.
4.	24.03- 04. 04.2025	Types of dose regimens - basis for selection, dose calculation, and dose interval. Individualisation and optimisation of the dosage regimen. Pharmacokinetic and pharmacodynamic interval.	2 h.
5.	07 – 25. 04.2025	Single administration of drugs. Basic pharmacokinetic parameters and their determination from plasma concentration/time data. Solving clinical practice cases.	2 h.
6.	28.04 – 09. 05.2025	Administration of drugs at a constant rate. Intravenous infusion. Steady-state concentration and time to reach it. Intravenous infusion with a loading dose. Multiple drug administration. Accumulation.	2 h.
7.	12 – 23. 05.2025	Colloquium	2 h.

Prepared by:
/Assoc. Prof. M. Shishmanova-Doseva, PhD/

Head of Department:.....
(Assoc. Prof. E. Apostolova, PhD)

16.01.2025