



Accepted by the Department Council № 1/17.01.2025

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 – LECTURES,  
SUMMER SEMESTER – ACADEMIC YEAR 2024/2025**

| <b>№</b> | <b>D A T E</b> | <b>T O P I C</b>  | <b>HOURS</b> |
|----------|----------------|---|--------------|
| 1.       | 11.02.2025     | Pharmacokinetics – basic principles and models.<br>General pharmacokinetics – drug absorption, binding of drugs to plasma proteins.   | 3 h.         |
| 2.       | 18.02.2025     | Basic pharmacokinetic parameters: bioavailability and bioequivalence. Drug distribution.<br>Barrier systems (blood-brain, placenta, blood-milk).  | 3 h.         |
| 3.       | 25.02.2025     | Biotransformation of drugs. Excretion of drugs and their metabolites.   | 3 h.         |
| 4.       | 04.03.2025     | Factors affecting drug pharmacokinetics – childhood, elderly, pregnancy, genetic factors.   | 3 h.         |
| 5.       | 11.03.2025     | Factors affecting drug pharmacokinetics – pathological processes and bad habits etc.  | 3 h.         |
| 6.       | 18.03.2025     | Pharmacokinetic approaches for optimizing and individualizing of drug therapy.<br>Therapeutic drug monitoring. System for recording of adverse drug reactions (Yellow card).                  | 3 h.         |
| 7.       | 25.03.2025     | Pharmacokinetic features of drugs acting on CNS: Antiepileptic drugs and Antidepressants.   | 3 h.         |
| 8.       | 01.04.2025     | Pharmacokinetic features of drugs acting on CNS: Neuroleptics and Hypnotic drugs.   | 3 h.         |
| 9.       | 08.04.2025     | Pharmacokinetic features of ACE inhibitors and Angiotensin receptor blockers (ARBs).<br>Pharmacokinetic features of Cardiac glycosides. Pharmacokinetic features of Calcium channel blockers. | 3 h.         |
| 10.      | 22.04.2025     | Pharmacokinetic features of Antiarrhythmic drugs. Pharmacokinetic features of Antianginal drugs. Pharmacokinetic features of Beta blockers.   | 3 h.         |
| 11.      | 29.04.2025     | Pharmacokinetic features of drugs affecting the respiratory system.<br>Pharmacokinetic features of Non-steroidal antiinflammatory drugs.  | 3 h.         |
| 12.      | 06.05.2025     | Pharmacokinetic features of Antibiotics and Chemotherapeutics.  | 3 h.         |
| 13.      | 13.05.2025     | Pharmacokinetic features of Insulin and Oral Hypoglycemic drugs.<br>Pharmacokinetic features of Corticosteroids.  | 3 h.         |
| 14.      | 20.05.2025     | Pharmacokinetic features of Coagulants, Anticoagulants and Antiagregants.   | 3 h.         |
| 15.      | 27.05.2025     | Pharmacokinetic features of Diuretics. Pharmacokinetic features of Antidyslipidemic drugs.  | 3 h.         |

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

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

16.01.2025



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