

PHARMACOLOGY 1 - practicals - summer term 2025/2026 <i>Friday 10:15 - 12:45 - K337</i>		
Week	Topic	Lecturer
1. 16.2.2026 - 20.2.2026	Introduction to Pharmacology. Practicals organization. Examples of pharmacological information. Toxicity of drugs, basic toxicological parameters. Doses - types of doses, cumulation. Pharmacological experiments.	dr. Hadová
2. 23.2.2026 - 27.2.2026	Pharmacokinetics I - Absorption and distribution Drug administration pathways, bioavailability. Drug distribution, distribution volume. Pharmacokinetic calculations. Examples of drugs with specific pharmacokinetics: levodopa, acetylsalicylic acid, nitroglycerine, warfarine, thiopental, insulin, thiopental	doc. Máťuš
3. 2.3.2026 - 6.3.2026	Pharmacokinetics II - Metabolism and excretion Drug metabolism, drug elimination. Clearance, AUC, elimination half-time. Pharmacokinetic calculations. Examples of drugs: morphine, phenobarbital, enalapril, paracetamol, carbamazepine	dr. Kilianová
4. 9.3.2026 - 13.3.2026	Pharmacokinetics III - Integration Modelling and simulation of digoxin pharmacokinetics. Pharmacokinetic calculations.	doc. Máťuš
5. 16.3.2026 - 20.3.2026	Pharmacodynamics I: Receptor theory: integration practicals. Computer simulation of isolated vascular preparation (agonists comparison). Signal transduction analysis.	doc. Vavřincová
6. 23.3.2026 - 27.3.2026	Pharmacodynamics II: Cell signalling. Receptor types. Basic signalling pathways. Examples of signal transduction: acetylcholine, epinephrine, insulin, estradiol Computer simulation of isolated vascular preparation (antagonists comparison).	doc. Vavřinec
7. 30.3.2026 - 3.4.2026	- holiday -	
8. 6.4.2026 - 10.4.2026	<u>TEST I: Pharmacokinetics + Pharmacodynamics</u>	doc. Vavřinec
9. 13.4.2026 - 17.4.2026	Autonomic nervous system overview I: Sympathomimetics. Sympatholytics. Computer simulation of isolated heart preparation - effect of sympathomimetics and sympatholytic drugs.	dr. Dóka
10. 20.4.2026 - 24.4.2026	Autonomic nervous system overview II: Cholinergic drugs. Computer simulation of isolated heart preparation - effect of cholinergic drugs Pharmacology of muscle tonus. Muscle relaxants – peripheral and central.	dr. Hadová
11. 27.4.2026 - 1.5.2026	- holiday -	
12. 4.5.2026 - 8.5.2026	Pharmacology of respiratory system: expectorants, antitussives, bronchodilators, antiasthmatic drugs. Pharmacology of peripheral autacoids.	doc. Máťuš
13. 11.5.2026 - 15.5.2026	<u>TEST II: Adrenergic and cholinergic nervous system. Peripheral autacoids, respiratory system.</u>	doc. Vavřincová
14. 18.5.2026 - 22.5.2026	Evaluation of the semester, consultations	doc. Máťuš

Credits for practicals

1. 100% attendance on all practicals
2. Maximum of 3 missed practicals. All missed practicals must be substituted.
3. Score of at least 60% in all midterm tests
4. Satisfactory presentation of seminar works and completing all protocols
5. Preparedness for each practical (lectures, books) and active participation

In Bratislava 28.01.2026

doc. PharmDr. Peter Kienek, PhD.
head of the department