

PHARMACOLOGY 1 - lectures - 3rd year, summer term 2025/2026

Tuesday 14:50 - 16:30 - K102

Week	Topic	Lecturer
1. 16.2.2026 - 20.2.2026	Introduction to the study of pharmacology. Scope of the subject, how drugs act - general principles.	doc. Máťuš
2. 23.2.2026 - 27.2.2026	Pharmacokinetics I. Absorption and distribution.	doc. Křenek
3. 2.3.2026 - 6.3.2026	Pharmacokinetics II. Biotransformation and excretion.	doc. Křenek
4. 9.3.2026 - 13.3.2026	Pharmacodynamics I. Mechanisms of drug action. Agonism, antagonism. Introduction to receptor theory. Drug targets, signal transduction mechanisms	prof. Klímas
5. 16.3.2026 - 20.3.2026	Pharmacodynamics II: Receptor proteins, G-regulatory proteins. Cellular mechanisms of intercellular signal transduction. Calcium and cyclic nucleotides.	doc. Vavrinec
6. 23.3.2026 - 27.3.2026	Pharmacodynamics III: Mechanisms of desensitization and tachyphylaxis. Tolerance and dependence. Drug interactions. Adverse reactions to drugs, allergy. Individual variations.	doc. Máťuš
7. 30.3.2026 - 3.4.2026	Introduction to vegetative nervous system. Receptors and basic functions of VNS. Adrenergic transmission I: Adrenergic receptor classification. Adrenergic agonists - sympathomimetics, selective sympathomimetics, indirectly acting sympathomimetics.	prof. Duriš Adameová
8. 6.4.2026 - 10.4.2026	- holiday -	
9. 13.4.2026 - 17.4.2026	Adrenergic transmission II: Adrenergic antagonists. α -adrenergic antagonists, β -adrenergic antagonists, indirectly acting antagonists.	prof. Duriš Adameová
10. 20.4.2026 - 24.4.2026	Cholinergic transmission I: Cholinergic synapse. Acetylcholine receptors. Pharmacology of the cholinergic synapse. Cholinergic agonists and antagonists. Cholinesterases and anticholinesterase drugs.	doc. Paul Hrabovská
11. 27.4.2026 - 1.5.2026	Cholinergic transmission II: Neuro-muscular junction. Muscular acetylcholine receptors. Cholinergic drugs modulating autonomic ganglia and neuromuscular junction. Neuromuscular blockade.	doc. Paul Hrabovská
12. 4.5.2026 - 8.5.2026	Peripheral autacoids: Serotonine, histamine, nitric oxide, purines. Drugs modulating peripheral autacoids: antihistaminics, serotonergic drugs, caffeine.	doc. Křenek
13. 11.5.2026 - 15.5.2026	Pharmacology of respiratory system: expectorants, antitussives, bronchodilants, antiasthmatic drugs.	doc. Křenek
14. 18.5.2026 - 22.5.2026	<i>Reserve, consultation</i>	

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 Křenek, PhD.
head of the department