

**Programme** : **GENERAL MEDICINE**

**Subject** : **PHARMACOLOGY 1**

**Abbreviation** : **FAR/VAB11**

**Schedule** : 30 hours of lectures  
45 hours of practicals

**Course distribution** : 3rd year, 6th semester

**Credits** : 3

**Form** : Lectures, practicals

**Lectures:**

**Lecturers :** MUDr. Petra Matalová, Ph.D.  
PharmDr. Martin Poruba, Ph.D.  
Prof. RNDr. Pavel Anzenbacher, DrSc.  
Doc. MUDr. Karel Urbánek, Ph.D.

**Study:** Continuous, **Mondays 15:00-16:30**, Department of Pharmacology

	<b>Theme</b>
1	Pharmacology – introduction and terminology
2	Drug research and development, adverse drug reactions
3	Mechanisms of drug action, receptor theory
4	Pharmacokinetics
5	Drug metabolism, introduction to toxicology
6	Pharmacogenetics, therapeutic drug monitoring
7	Vegetative nervous system
8	Peripheral and central muscle relaxants, antiparkinsonics
9	Pharmacology of pain, analgesics
10	General and local anaesthetics
11	<i>Easter Monday</i>
12	Antipsychotics, antidepressants
13	Anticonvulsants
14	Drug dependence, drugs of abuse
15	Theme reserved

## Practicals:

**Leading teacher:** Doc. MUDr. Karel Urbánek, Ph.D.

**Study :** Continuous

	Theme
1	Introduction to practical training; Basic terminology. Pharmacopoeia, drugs names. General principles of drug prescription, patient adherence, non-technical aspects of prescribing.
2	Prescription of factory made drugs; liquid drug formulations
3	Soft formulations (ointments, creams, pastes, gels)
4	Solid drug formulations (powders, tablets, suppositories), Prescription of controlled drugs. Prescription for children.
5	Parenteral drugs
6	<i>Test I: drug forms, prescription (lecture 1, practicals 1-4), parenterals</i> Pharmacy, pharmacodynamics
7	Pharmacokinetics, Therapeutic Drug Monitoring
8	<i>Test II: pharmacokinetics, pharmacodynamics, TDM</i> Sympathomimetics and sympatholytics
9	Parasympathomimetics and parasympatholytics
10	<i>Test III: drugs affecting autonomic nervous system, muscle relaxants</i> Opioid analgesics
11	Non-steroidal anti-inflammatory drugs
12	<i>Test III: analgesics, anaesthetics</i> Anxiolytics, hypnotics
13	Treatment of neurodegenerative disorders, nootropics
14	<i>Credit test (oral examination)</i>
15	<i>Credit on the basis of determined conditions</i>

**Completed by :** Credit

**Requirements :** Participation in 90% of practicals, all MCQs with a 70% average score, final oral credit examination.

## Literature:

1. Rang H.P., Dale M.M., Ritter J.M.: **Pharmacology**, Churchill Livingstone, Edinburgh
2. Katzung B.G.: **Basic and Clinical Pharmacology**, Appleton and Lange, Prentice Hall Int., London
3. Levine R.R.: **Pharmacology. Drug Actions and Reactions**, The Parthenon Publishing Group, London