

**DESCRIPTION OF COURSE UNIT FOR DOCTORAL STUDIES  
AT VILNIUS UNIVERSITY**

<b>Scientific Area/eas, Field/ds of Science</b>	Medical and Health Sciences (M 000): Medicine (M 001)			
<b>Faculty, Institute, Department/Clinic</b>	Faculty of Medicine Institute of Clinical Medicine Clinic of Psychiatry			
<b>Course unit title (ECTS credits, hours)</b>	<b>Clinical Psychopharmacology</b> 6 credits (162 hours)			
<b>Study method</b>	<b>Lectures</b>	<b>Seminars</b>	<b>Consultations</b>	<b>Self-study</b>
Number of ECTS credits	-	-	3	3
<b>Method of the assessment (in 10 point system)</b>	<p>To prepare and present a report. The presentation is prepared on a specific topic agreed with the coordinating lecturer (the doctoral student must analyze, review and present the latest scientific publications related to the chosen relevant topic). The criteria for evaluating of the report are on a 10-point scale: a) clarity, appropriateness of the selection of sources and arguments (6 points); b) substantiation of conclusions with the arguments presented in the text (2 points); c) language culture, consistency of presenting (1 point); d) correctness of citation of sources (1 point).</p>			
<b>PURPOSE OF THE COURSE UNIT</b>				
<p>To understand the achievements of modern psychopharmacology, clinical research methods, to fully know the practical algorithms, problems and perspective of the application of psychopharmacology.</p>				
<b>THE MAIN TOPICS OF COURSE UNIT</b>				
<p>History of treatment of mental illnesses: bloodletting, pyro therapy, insulin coma therapy, electrical impulse therapy, chronobiology of psychotropic drugs. The first psychiatric treatment facilities in Lithuania and treatment methods.</p> <p>Animal models of drug testing. Neurotransmission. Cytochrome P450 enzyme system, its clinical significance. Psycho genetics. Its practical significance, application principles and possibilities and perspective.</p> <p>Classifications of psychotropic drugs. Classification of antidepressants, mode of action. Tricyclic antidepressants; monoamine oxidase inhibitors; second generation antidepressants; dual serotonergic effect; selective serotonin and noradrenaline reabsorption inhibitors; noradrenergic and specific serotonergic effects; pharmacodynamics, pharmacokinetics, typology, clinical characteristics of indications, contraindications, dosage, side effects of selective noradrenaline reabsorption inhibitors and other antidepressants.</p> <p>Mode of action of antipsychotics: the dopaminergic theory. Indications, contraindications, treatment principles. Classification of antipsychotics. Clinical characteristics of classic neuroleptics, dosage. Pharmacodynamics, pharmacodynamics, indications, contraindications, clinical characteristics of long-acting classical neuroleptics. Pharmacodynamics, pharmacokinetics of new, second-generation antipsychotics, their advantages over classic neuroleptics, indications, clinical features of individual drugs, dosage. Side effects and complications of antipsychotics. Acute dystonias, clinic and treatment. Acute akathisia, subjective and</p>				

objective symptoms, clinical significance, differentiation, treatment. Neuroleptic-induced parkinsonism syndrome, correction. Tardive dyskinesia, pathogenesis, clinic, treatment. Neuroleptic malignant syndrome, clinic, diagnosis, treatment. Indications for prescribing anticholinergic drugs, their side effects.

Classification of mood stabilizers, indications, pharmacodynamics, pharmacokinetics, dosage, caused side effects, their correction.

Classification of tranquilizers, general clinical characteristics, indications, contraindications. Mode of action of benzodiazepines, pharmacokinetics, clinical characteristics, principles of use, dosage, side effects. Withdrawal syndrome.

Classification of neuro metabolic drugs (nootropics), indications.

Psychotropic drugs and EIT, TMS, ŠT, n. vagal stimulation, psychosurgery.

Characteristics and practical aspects of other psychotropic drugs.

Recent organic and symptomatic; addictions; psychoses; moods; anxiety; algorithms for the treatment of insomnia and other mental disorders.

### RECOMMENDED LITERATURE SOURCES

1. Dembinskas ir kt. Psichiatrija (vadovėlis). Vilnius. 2003. p. 509–612.
2. A. Šiurkutė. Klinikinės psichofarmakologijos pagrindai. 2018. 93 p.
3. Ansari A., Osseur D. N. Psychopharmacology. A Concise Overview. Oxford University Press. 2020. <https://global.oup.com/academic/product/psychopharmacology-9780197537046?cc=lt&lang=en&>
4. Stahl S. M. Stahl's Essential Psychopharmacology. Cambridge University Press. 2021. <https://www.cambridge.org/core/what-we-publish/collections/stahl-online>
5. Ansari A., Osseur D. N. Psychopharmacology.
6. Stahl S. M. Prescriber's Guide. Cambridge University Press. 2021. <https://www.cambridge.org/core/books/prescribers-guide/74D5CB608440BF735B3567739E05BE09>
7. Goldberg F. J., Stahl S. M. Practical Psychopharmacology. Cambridge University Press. 2021. <https://www.cambridge.org/core/books/practical-psychopharmacology/1B1D73812A122EB6CE75FFD7FA727DCB>
8. Stahl S. M. Case Studies: Stahl's Essential Psychopharmacology. Cambridge University Press. 2021. <https://www.cambridge.org/core/books/case-studies-stahls-essential-psychopharmacology/4EBCB8A0B2422EA9E7D9334514A73A5C>
9. American Psychiatric Association. Clinical Practice Guidelines. <https://psychiatry.org/psychiatrists/practice/clinical-practice-guidelines>
10. Clinical Practice Guidelines and Recommendations. Mayo Clinic Proceedings. <https://www.mayoclinicproceedings.org/guidelines>
11. Mental Health Topics. NIMH. <https://www.nimh.nih.gov/>

### CONSULTING LECTURERS

1. Coordinating lecturer: Alvydas Navickas (Prof. Dr.).
2. Sigita Lesinskienė (Prof. Dr.).
3. Edgaras Dlugauskas (Assist. Prof. Dr.).
4. Sergejus Andruskevičius (Assoc. Prof. Dr.).

### APPROVED:

By Council of Doctoral School of Medicine and Health Sciences at Vilnius University:  
29<sup>th</sup> of September 2022

Chairperson of the Board: Prof. Janina Tutkuvienė