

Course descriptions

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STATE EXAM DESCRIPTION

Academic year: 2025/2026	
University: Comenius University Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF/3-LKFB-005/22	Course title: Dissertation Defense
Number of credits: 30	
Educational level: III.	
Course requirements: <ul style="list-style-type: none"> - obtaining at least 210 credits (in a 4-year full-time and 5-year part-time study) - submission of an application for a state examination permit - defense of the dissertation no later than 4 months before the date of completion of the standard length of study - authorship or co-authorship of a doctoral student of at least three scientific papers in extenso in internationally recognized journals registered in databases, such as Web of Science, Medline or SCOPUS as a basic condition for accepting an application for permission to defend a dissertation; in at least one of these works, the doctoral student is the first author 	
Learning outcomes: <ul style="list-style-type: none"> - the graduate of the field has mastered the principles and methodology of scientific work, from the ability to orient in the latest knowledge of the field, through scientific formulation of the problem, assessment of the ethical side of scientific work, planning and implementation of research, scientific processing of obtained data, their interpretation to their presentation, including in international fora, and possible proposals for their application in practice. - the graduate of the course Medical, clinical and pharmaceutical biochemistry 2 can work independently scientifically and bring their own solutions to problems in the field. He/she can contribute to the development of this field through scientific and teaching work 	
Class syllabus: <ul style="list-style-type: none"> - scientific research on a current problem in the field or a multidisciplinary problem with a focus on medical clinical and pharmaceutical biochemistry - mastering the principles and methodology of scientific experimental work or work in biochemical, pharmacological, toxicological and biotechnological research up to the preparation of the text of a scientific publication in cooperation with the instructor in the form in extenso, especially in English - publishing and lecturing activities and active participation in scientific events - pedagogical activity (max. 4 hours per week / year = 208 hours / year = 104 hours / semester) only for full-time form 	
State exam syllabus:	
Recommended literature: <p>DOBROTA, D., a kol. Lekárska biochémia. Martin: Vydavateľstvo Osveta, 2016. 799 s. ISBN 978-80-8063-444-5.</p> <p>DEVLIN, T.M., a kol. Biochemistry with clinical correlations. Wiley-Liss, 2002, 1216 s. ISBN 0-471-41136-1.</p> <p>LODISH, H., a kol. Molecular Cell Biology. 7th edition, Freeman and Company NewYork: 2013, 1154 s.. ISBN-13 978-1-4641-0981-2.</p>	
Languages necessary to complete the course:	

Slovak language / English language
Last change: 21.08.2023
Approved by: prof. RNDr. Peter Račay, PhD., prof. MUDr. Dušan Dobrota, CSc., prof. RNDr. Peter Kaplán, CSc.

STATE EXAM DESCRIPTION

Academic year: 2025/2026	
University: Comenius University Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF/3-LKFB-004/22	Course title: Dissertation Examination
Number of credits: 20	
Educational level: III.	
Course requirements: <ul style="list-style-type: none"> - obtaining at least 60 credits, including 20 credits for mandatory courses of the Methodology of Scientific Work, Introductory of Statistical Analysis and Examination in a Foreign / World Language as a condition for granting consent to take a dissertation exam (DE) - registration for DE within 24 months from the beginning of the study (in a 4-year full-time study) - registration for DE within 30 months from the beginning of the study (in a 5-year external study) - elaboration of a written part for the dissertation exam - successful answering of 2 theoretical questions from the field of Medical, clinical and pharmaceutical biochemistry and presentation of the basic theses of the written part of the dissertation exam 	
Learning outcomes: <ul style="list-style-type: none"> - graduate of the course Medical, Clinical and Pharmaceutical Biochemistry 1 has deep theoretical knowledge based on the current state of scientific knowledge in the field, masters the principles and methodology of scientific work and is qualified to perform professional and scientific activities in biochemistry, clinical biochemistry, biomedicine, pharmacy, pharmaceutical research and biotechnology - has the ability to work independently and bring their own solutions to problems in the field and in related fields, especially in the profession of researcher and university teacher 	
Class syllabus: <ul style="list-style-type: none"> - study of modern knowledge of medical, clinical and pharmaceutical biochemistry and acquisition of comprehensive and in-depth knowledge of medical, pharmaceutical and veterinary studies and science of processes taking place in a living organism - clarifies the mechanism of biological processes and their regulation at the molecular level - creates preconditions for monitoring the physiological and pathological state of the organism - a specific area is drug interactions with specific enzyme systems involved in drug biotransformation, at the level of cells, subcellular fractions and isolated cell organelles - interest in plant biochemistry with an emphasis on the study of enzymes of biogenesis of secondary metabolites produced by medicinal plants and the role of signaling molecules in the regulation of their production - knowledge of biochemistry and their application in the field of preclinical and clinical medicine as well as pharmacy - the study of medical, clinical and pharmaceutical biochemistry is very closely linked to sectors which are in the primary sphere of interest in the scientific and technological development of modern society, such as healthcare, the pharmaceutical industry, new drug development, nutrition and biotechnology 	

- pedagogical activity (max. 4 hours per week / year = 208 hours / year = 104 hours / semester)
only for full-time form

State exam syllabus:

Recommended literature:

DOBROTA, D., a kol. Lekárska biochémia. Martin: Vydavateľstvo Osveta, 2016. 799 s. ISBN 978-80-8063-444-5.

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Languages necessary to complete the course:

Slovak language / English language

Last change: 10.08.2023

Approved by: prof. RNDr. Peter Račay, PhD., prof. MUDr. Dušan Dobrota, CSc., prof. RNDr. Peter Kaplán, CSc.