

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice	
<b>Faculty:</b> Faculty of Medicine	
<b>Course ID:</b> ULBL/ MB/22	<b>Course name:</b> Molecular Biology
<b>Course type, scope and the method:</b> <b>Course type:</b> Seminar <b>Recommended course-load (hours):</b> <b>Per week: 2 Per study period: 28</b> <b>Course method:</b> present	
<b>Number of ECTS credits:</b> 10	
<b>Recommended semester/trimester of the course:</b>	
<b>Course level:</b> III.	
<b>Prerequisites:</b>	
<b>Conditions for course completion:</b> oral examination (100%)	
<b>Learning outcomes:</b> To introduce the basic concepts of molecular biology and genetics, including information related to human genome, mutations and gene polymorphism and their role in pharmacodynamics and pharmacokinetics. To give students a thorough grounding in the theoretical and practical foundations of basic genetics. Students have acquired an understanding of the major concepts in human and molecular genetics and have obtained basic information related to genetic and molecular biology methods in pharmacogenetics and clinical practice.	
<b>Brief outline of the course:</b> Basic concepts of molecular biology Structure of genes and gene expression Human genome, genomic data mining Mutations, gene polymorphisms and their detection Genetics of cancer Molecular biology methods in human genetics and clinical practice Epigenetics	
<b>Recommended literature:</b> 1. Šalagovič, J., Ondruššeková, A., Mičková, H., Klimčáková, L., Židzik, J., Slabá, E., Hudáková, T.: Lekárska biológia I., Equilibria, Košice 2009 2. Mičková, H., Šalagovič, J. a kol.: Lekárska biológia II., Equilibria, Košice 2007 3. Snustad, D. P., Simmons, M. J.: Genetika, Masarykova univerzita, 2017 4. Perlík, F., Slanař, O.: Individualizace farmakoterapie, Triton, 2016 5. Lodish, H. a kol.: Molecular Cell Biology. Macmillan learnings, 2021	
<b>Course language:</b> Slovak, English	
<b>Notes:</b>	
<b>Course assessment</b> Total number of assessed students: 5	
Ne	Pr
0.0	100.0
<b>Provides:</b> prof. RNDr. Ján Šalagovič, PhD.	

**Date of last modification:** 24.04.2022

**Approved:**