

Course code	BUM105		
Course title	PERSONALIZED MEDICINE		
General information			
Study programme	Graduate study „ Biotechnology in medicine“	Academic year	
Lecturer	Prof. Dr. Sc. Krešimir Pavelić		
Status	Required	Elective	
ECTS system			3
Course objectives			
<p>Insight into recent molecular medicine achievements in personalized medicine and individualized approach to the patient will be presented in this course. Advances in the presymptomatic diagnostics of hereditary diseases and prediction of their severity and clinical outcome will be discussed as well as individual's response to therapy based on its genetic constitution.</p>			
Course description			
<p>Introduction to basics of personalized medicine. Modern molecular biology techniques in the analysis of human genome, transcriptome and proteome variability. P4 medicine (predictive, preventive and participated medicine and pharmacogenetics). Application of personalized medicine in clinics (oncology, gastroenterology, endocrinology, pediatrics, neurology etc.). Nutrigenetics. Biobanking and molecular epidemiology in personalized medicine. Predictive genetic testing, genetic counseling and ethics in personalized medicine. New topics in personalized medicine.</p>			
Learning outcomes			
<p>Basic understanding of advances in the field of personalized medicine and current possible application of predictive and preventive medicine and pharmacogenetics in every day clinical practise.</p>			