

University of Mostar School of Medicine 2024/25
PERSONALIZED MEDICINE AND BIOTECHNOLOGY, timetable 2020/2021
Course coordinator: assistant professor Sandra Kostić, PhD

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| SK | assoc.prof.Sandra Kostić | lectures |
| VM | assoc.prof. Vlatka Martinović | seminars |
| UG | assist.prof. Una Glamočlija | practicals |

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|-------------|-----------------|----|-----------------|----|-----------------|----|-----------------|----|-----------------|----|
| Cjelina | 1 | | 2 | | 3 | | 4 | | 5 | |
| Datum | 02.6.2025 (Mon) | | 03.6.2025 (Tue) | | 04.6.2025 (Wed) | | 05.6.2025 (Thu) | | 06.6.2025 (Fri) | |
| Skupine | V1 | V2 | V1 | V2 | V1 | V2 | V1 | V2 | V1 | V2 |
| | S1 | | S1 | | S1 | | S1 | | S1 | |
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| 14.40-15.25 | SK | | SK | | VM | | UG | | UG | |
| 15.30-16.15 | | | | | | | | | | |
| 16.20-17.05 | SK | | SK | | VM | | UG | | UG | |
| 17.10-17.55 | | | | | | | | | | |
| 18.00-18.45 | SK | | SK | | VM | | UG | | UG | |
| 18.50-19.35 | | | | | | | | | | |

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| Cjelina | 1st exam term | | | | | | | | | |
| Datum | 07.6.2025 (Sat) | | | | | | | | | |
| Skupine | V1 | V2 | V1 | V2 | V1 | V2 | V1 | V2 | V1 | V2 |
| | S1 | | S1 | | S1 | | S1 | | S1 | |
| | | | | | | | | | | |
| 10.00-11.00 | exam | | | | | | | | | |
| 14.40-15.25 | | | | | | | | | | |

SK Introduction to biotechnology
The main aspects of medical biotechnology and personalized medicine

SK Using animal models for drug development
Bioinformatics – what to do with all the data?

VM Examples of personalized treatments for specific chronic conditions
The integration of personalized medicine into the existing healthcare system - the challenges from ethical, legal and social aspects

UG Molecular diagnostics as basis - Laboratory methods for personalized medicine (sequencing, DNA and RNA isolation and analysis, cDNA synthesis, qPCR, gene expression analysis, SNP analysis, flow cytometry...)
UG How to make a model - Loss and gain of function experiments (CRISPR/CAS, knock in/out, LoxP/Cre system and overexpression), embryonic models for drug development

UG The basis of pharmacogenomics and pharmacogenetics
Examples of personalized medicine based pharmacogenetics