# Detaljni izvedbeni plan

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| **Akademska godina:**<br>2025/2026 | **Semestar:**<br>Ljetni |
| **Godina studija:**<br>1 | **Studiji:**<br>Sestrinstvo (I) (izborni) (Prijediplomski)<br>Komunikologija (R) (izborni) (Prijediplomski) |

## I. OSNOVNI PODACI O KOLEGIJU

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| **Naziv kolegija:** Laboratory medicine: from sample to laboratory test results | |
| **Kratica kolegija:** IZBP272 | |
| **ECTS bodovi:** 4 | **Šifra kolegija:** 280422 |
| **Preduvjeti za upis kolegija:** Nema | |
| *Ukupno opterećenje kolegija* | |
| **Vrsta nastave** | **Ukupno sati** |
| Predavanje | 30 |
| Seminar | 5 |
| Metodička vježba | 15 |
| **Mjesto i vrijeme održavanja nastave:** HKS – prema objavljenom rasporedu | |

## II. NASTAVNO OSOBLJE

*Nositelj kolegija*


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| **Ime i prezime:** Leniček Krleža Jasna | |
| **Akademski stupanj/naziv:** | **Izbor:** naslovni docent |
| **Kontakt e-mail:**<br>jlenicekkrleza@zvu.hr | **Telefon:** |


**Konzultacije:** Prema objavljenom rasporedu

*Suradnici na kolegiju*

## III. DETALJNI PODACI O KOLEGIJU

**Jezik na kojem se nastava održava:** English

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| **Opis kolegija** | The elective course aims to familiarize students with all potential sources of errors that affect the accuracy of laboratory test results, whether performed in a laboratory or on POC devices.<br><br>Through lectures, students will learn the fundamentals of proper patient preparation, correct sampling techniques, appropriate sample transport, result interpretation, recognition of interferences, and corrective actions when interferences are present.<br><br>The seminars for this elective course are designed to take place within the laboratory, where laboratory samples will be analyzed. Additionally, seminars will include independent student work in a 10-minute presentation on a topic covered in the lectures. |
| **Očekivani ishodi učenja na razini kolegija** | 1. Describe the diagnostic approach and diagnostic workup of the patient.<br><br>2. Explain biological variations and their impact on the biochemical composition of body fluids.<br><br>3. Relate the type of container to the sample for laboratory testing.<br><br>4. Compile a list of all potential preanalytical errors.<br><br>5. Demonstrate patient preparation for individual laboratory tests.<br><br>6. Distinguish preanalytical error and/or interference from pathological findings.<br><br>7. Categorize laboratory tests according to urgency.<br><br>8. Compare the results obtained with reference intervals, critical values, and the patient's health status.<br><br>9. Analyze the results obtained on POC devices. |
| *Literatura* | |
| **Obavezna** | Topić E. i sur. Medicinska biokemija i laboratorijska medicina ukliničkoj praksi. Medicinska naklada, Zagreb, 2018. |
| **Dopunska** | 1. Lenicek Krleza J, Dorotic A, Grzunov A, Maradin M. Croatian Society of Medical Biochemistry and Laboratory Medicine. Capillary blood sampling: national recommendations for the Croatian Society of Medical Biochemistry and Laboratory Medicine. Biochem Med (Zagreb) 2015;25(3):335-58.<br>2. Simundic at al. Recommendation for venous blood sampling. Clin Chem Lab Med 2018;56(12):2015-38. doi: 10.1515/cclm-2018-0602.<br>3. Lenicek Krleza J, Honovic L, Vlasic Tanaskovic J, Podolar S, Rimac V, Jokic A, Post-analytical laboratory work: national recommendations from the Working Group for Post-analytics on behalf of the Croatian Society of Medical Biochemistry and Laboratory Medicine. BiochemMed (Zagreb) 2019;29(2):020502. |
| *Način ispitivanja i ocjenjivanja* | |

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| **Polaže se** DA | **Isključivo kontinuirano praćenje nastave** NE | **Ulazi u prosjek** DA |

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| **Preduvjeti za dobivanje potpisa i polaganje završnog ispita** | 1. Regular class attendance (at least 80% attendance)<br><br>2. Properly completed seminar obligations |
| **Način ocjenjivanja** | Continuous evaluation of student work in addition to regular class attendance (which is a requirement for taking the exam), adding points for active participation in seminars and the results of the written exam result in an overall grade as follows: sufficient (2): 60-69 points; good (3): 70-79 points; very good (4): 80-89 points; excellent (5): 90-100 points. |
| **Način polaganja ispita** | Continuous evaluation of student work through:<br>1. Teaching activities: 10-minute seminar presentation<br>2. Final exam (written) |
| **Detaljan prikaz ocjenjivanja unutar Europskoga sustava za prijenos bodova** | |

| VRSTA AKTIVNOSTI | ECTS BODOVI - koeficijent opterećenja studenta | UDIO OCJENE (%) |
|---|---|---|
| Class Attendance | 1.2 | 0 |
| Seminar Presentation | 0.8 | 30 |
| **Total in Class** | 2 | 30 |
| Final Exam | 2 | 70 |
| **TOTAL ECTS (Classes + Final Exam)** | 4 | 100 |

**Datumi ispitnih rokova:** 03.06.2026; 10.06.2026; 01.07.2026

## IV. TJEDNI PLAN NASTAVE

*Metodičke vježbe*

| # | Tema |
|---|---|
| 1 | Examples from practice: how to recognize interferences |
| 2 | Examples from practice: the most common interferences in different types of samples |
| 3 | Examples from practice: corrective actions in case of interferences |
| 4 | Examples from practice: POCT and rapid tests |
| 5 | Practical examples: how to recognize a pre-analytical error |

*Predavanja*

| # | Tema |
|---|---|
| 1 | Diagnostic approach to the patient |
| 2 | Biological variations |
| 3 | Types of containers, sample stability and transport conditions to the laboratory |
| 4 | Types of samples for laboratory tests |
| 5 | Potential sources of errors during sampling |
| 6 | Types of containers, sample stability and transport conditions to the laboratory |
| 7 | Classification of laboratory tests according to urgency, complexity, and assessment of the function of individual organs or organ systems |
| 8 | Algorithms of tests in individual disease states |
| 9 | Interferences – endogenous and exogenous influences on laboratory test results |
| 10 | Overview of laboratory test results (reference values, critical values) |
| 11 | Point of Care Testing (POCT): from device selection, sampling to analysis and interpretation of results |