

<b>CLINICAL INTERPRETATIONS OF LABORATORY FINDINGS</b>	
<b>GENERAL INFORMATION</b>	
Course coordinator	Assoc. Prof. Tatjana Bačun, MD, PhD
Assistant/Associate	Assoc. Prof. Aleksandar Kibel, MD, PhD Assoc. Prof. Dubravka Mihaljević, MD, PhD Assist. Prof. Mirjana Stupnišek, MMedLabDiag, PhD Ivana Tolj, MD
Study Programme	Undergraduate University Study of Medical Laboratory Diagnostics
Status of the course	mandatory
Year of study, semester	3 <sup>rd</sup> year, 6 <sup>th</sup> semester
ECTS	<b>4</b>
Workload (hours)	Lectures: 15; Seminars: 5; Practicum: 30
Expected number of students	30 - 35
<b>COURSE DESCRIPTION</b>	
<b>Course objectives</b>	
The goal is to train the student and provide him with basic knowledge that will enable him to connect disease pathophysiology, laboratory technology and medical laboratory diagnostics with disease diagnosis and patient monitoring.	
<b>Enrolment requirements and entry competencies</b>	
Attended and passed exams 2nd year undergraduate study of medical laboratory diagnostics.	
<b>Learning outcomes at the Programme level</b>	
<b>1.2, 2.7, 3.2</b>	
<b>Learning outcomes at the course level</b>	
After attending lectures, completing seminars and exercises, independent study and passing the exam, the student will be able to: <ol style="list-style-type: none"> <li>1. analyze and interpret the results of laboratory diagnostic tests in a team with doctors.</li> <li>2. independently interpret urgent laboratory findings.</li> <li>3. interpret the results of treatment and monitoring of the most common internal medicine, neurological, oncological and infectious diseases.</li> <li>4. apply at the analytical level by synthesizing the adopted theoretical fundamentals and practical methods and procedures.</li> </ol>	
<b>Course content</b>	
<p><b>Lectures:</b> Connection between laboratory diagnostics and clinical practice. Impairment of kidney function and renal function. Laboratory findings in diseases of the heart and blood vessels. Reproductive system in men and women. Oncological diseases by organ systems. Disorder of blood-forming organs. Frequent diseases of the respiratory system. Laboratory features in endocrinological diseases. Laboratory determination of liver values in diseases of the hepatobiliary tract. GI system dysfunction. Metabolic diseases. Genito-urinary infections. STDs and HIV. Diseases of the central nervous system.</p> <p><b>Seminars:</b> Impact of acid-base homeostasis disorders on kidney function. Interpretation of laboratory findings in heart and cardiovascular diseases. Interpretation of laboratory findings in diseases of the GI system.</p> <p><b>Exercises:</b> Contribution of good laboratory interpretation as a basis for diagnostics. The influence of acid-base homeostasis disorders on kidney function. Interpretation of laboratory findings in heart and cardiovascular diseases. Laboratory indicators in diseases of the reproductive organs.</p>	

Autoimmune and oncological diseases. Significance of laboratory indicators in diseases of hematopoietic organs. Monitoring changes in laboratory findings in respiratory diseases. The importance of laboratory diagnostics in diseases of the endocrine system. Interpretation of laboratory findings in diseases of the GI system. Interpretation of laboratory findings in genitourinary, STD and HIV infections. The importance of laboratory diagnostics in CNS diseases.

#### Mode of teaching

Lectures, seminars and exercises (independent assignments).

#### Student obligations

Attending classes, attending lectures, seminars and exercises according to the Rulebook on studying at the Josip Juraj Strossmayer University in Osijek. A student can excuse himself from 30% of each form of teaching. Undone exercise must be graded.

#### Monitoring student work (*connectivity of learning outcomes, teaching methods and grading*)

Students who have properly completed all forms of teaching acquire the right to sign and take the final exam. The final exam is mandatory and consists of a written exam.

The written exam consists of 40 questions with 4 possible answers, of which only one is correct. The minimum criterion for obtaining evaluation points is 60% of correctly solved questions.

*Evaluation of the written exam:*

Percentage of correct answers (%)	Grade
0-59.99 (0-23 points)	insufficient (1)
60.00-69.99 (24-27 points)	sufficient (2)
70.00-79.99 (28-31 points)	good (3)
80.00-89.99 (32-35 points)	very good (4)
90,00-100 (36-40 points)	excellent (5)

#### Required reading (available in the library and through other media)

Title	Number of copies in the library	Availability through other media
Topić E, Primorac D, Janković S, Štefanović D et al.: Medical biochemistry and laboratory medicine in clinical practice, 2nd amended and revised edition. Zagreb: Medicinska naklada; 2018.	8	
Mihić D, Mirat J, Včev A et al. Internal medicine. 1st edition. Osijek: Studio HS internet d.o.o.; in 2021.	15	

#### Additional reading

Sertić J et al.: [Katalog dijagnostičkih laboratorijskih pretraga](#). Zagreb: Medicinska naklada; 2008.  
 Begovac J, Božinović D, Lisić M, Baršić B, Schoenwald S: Infektologija. Zagreb: Profil; 2006.  
 Janković S, Eterović D: Fizikalne osnove i klinički aspekti medicinske dijagnostike. Zagreb: Medicinska naklada; 2002.  
 Mardešić D. et al. Pedijatrija. Zagreb: Školska knjiga; 2000.

#### Course evaluation procedures

Anonymous, quantitative, standardised student survey on the course and the teacher's work implemented by the Quality improvement office of the Faculty of Medicine Osijek.

#### Note /Other

E-learning is not included in the class quota, but it is used in teaching and it contains links to various sites and video and audio materials available on websites.