



**JOSIP JURAJ STROSSMAYER UNIVERSITY OF OSIJEK
FACULTY OF MEDICINE OSIJEK**



**GRADUATE UNIVERSITY STUDY PROGRAMME
OF MEDICAL LABORATORY DIAGNOSTICS**

DESCRIPTION OF THE PROGRAMME

Osijek, 2022

DESCRIPTION OF THE STUDY PROGRAMME

List of mandatory and elective courses

1st Year – Mandatory Courses

Label of subjects	Course name	Courses leader	Associates in the course	Teaching hours				SUS	Σ OS	ECTS
				L	S	E	Σ KN			
1st semester										
123224	Toxicological chemistry	Asst. Prof. Sanja Mandić, MMedBiochem, PhD	Asst. Prof. Dario Mandić, MMedBioch, PhD Asst. Prof. Vesna Horvat, MMedBioch, PhD Maja Lukić, MMedBiochem Tihana Pavošević, MMedBiochem Tara Rolić, MMedBiochem	30	15	15	60	65	125	5
123242	Clinical immunology and immunogenetics	Prof. Jasminka Milas Ahić, MD, PhD	Asst. Prof. Vlatka Periša, MD, PhD Asst. Prof. Tihana Šimundić, MD, PhD Asst. Prof. Teuta Opačak-Bernardi, MBiol, PhD	30	30	-	60	65	125	5
123235	Clinical haematology	Asst. Prof. Vlatka Periša, MD, PhD	Asst. Prof. Maja Bogdan, MD, PhD Asst. Prof. Jasminka Rajc, MD, PhD Asst. Prof. Mirjana Suver Stević, PhD Marija Milić, MMedBiochem, PhD Stefan Mrđenović, MD, PhD Danijela Mjeda, MD Zdravka Krivdić Dupan, MD	30	30	-	60	65	125	5
123233	Clinical microbiology and epidemiology	Prof. Maja Miškulin, MD, PhD Assoc. Prof. Domagoj Drenjančević, MD, PhD	Asst. Prof. Arlen Antolović – Požgain, MD, PhD Asst. Prof. Maja Bogdan, MD, PhD Asst., Ante Cvitković, MD, PhD	30	30	-	60	65	125	5
123237	Cytodiagnosics	Assoc. Prof. Biljana Pauzar, MD, PhD	Asst. Prof. Branka Lončar, MD, PhD Assoc. Prof. Valerija Miličić, MD, PhD Asst. Prof. Marija Perić, MD, PhD	30	30	-	60	65	125	5
	Elective courses I		-	35	20	15	70	55	125	5
Total 1st semester				185	155	30	370	380	750	30

Label of subjects	Course name	Courses leader	Associates in the course	Teaching hours				SUS	Σ OS	ECTS
				L	S	E	Σ KN			
2nd semester										
123243	Emergency medicine and emergent situations in laboratory medicine	Asst. Prof. Dubravka Mihaljević, MD, PhD	Prof. Silvio Mihaljević, MD, PhD Prof. Jure Mirat, MD, PhD Prof. Robert Steiner, MD, PhD Assoc. Prof. Ines Bilić Ćurčić, MD, PhD Assoc. Prof. Suzana Mimica, MD, PhD Assoc. Prof. Ljiljana Perić, MD, PhD Asst. Prof. Vlatka Periša, MD, PhD Asst. Prof. Vatroslav Šerić, MMedBiochem, PhD Ivana Tolj, MD	30	10	20	60	65	125	5
123230	Application of cell and tissue culture in biomedical research	Prof. Ljubica Glavaš-Obrovac, MSc Biotechnol, PhD	Prof. Tatjana Belovari, MD, PhD Assoc. Prof. Stana Tokić, MBiolMol, PhD Asst. Prof. Marijana Leventić, MBiol, PhD Asst. Prof. Katarina Mišković Špoljarić, MEng, PhD	30	15	15	60	65	125	5
123240	Molecular genetics and molecular mechanisms	Prof. Dragan Primorac, MD, PhD	Prof. Ljubica Glavaš-Obrovac, MBiotech, PhD Prof. Marija Heffer, MD, PhD Prof. Martina Smolić, MD, PhD Assoc. Prof. Jasenka Wagner Kostadinović, MMedBiochem, PhD Asst. Prof. Teuta Opačak-Bernardi, MBiolMol, PhD Marta Balog, MBiol, PhD Tea Omanović Kolarić, MD, PhD Hrvoje Roguljić, MD, PhD Ana Petrović, MD Aurora Antolović Amidžić, MPharm	30	30	-	60	65	125	5
123232	Basics of pharmacology	Assoc. Prof. Ines Bilić Ćurčić, MD, PhD	Asst. Prof. Željko Debeljak, MMedBiochem, PhD Tea Omanović Kolarić, MD, PhD Nikola Raguž-Lučić, MD, PhD Hrvoje Roguljić, MD, PhD Aurora Antolović Amidžić, MPharm	30	30	-	60	65	125	5
	Elective courses II			35	20	15	70	55	125	5

	Elective courses III			35	20	15	70	55	125	5
Total 2nd semester				190	125	65	380	370	750	30
Total mandatory courses				270	220	50	540	585	1125	45
Elective courses required				105	60	45	210	165	375	15
TOTAL 1st year:				375	280	95	750	750	1500	60

Legend: L - lectures; S - seminars; E - exercises; Σ KN - total hours of contact teaching; SUS – student self-learning; Σ OS - total student load; ECTS credits according to the European higher education system (1 ECTS corresponds to 25 hours of total student load)

1st year- Elective courses

Label of subjects	Elective course name	Courses leader	Associates in the course	Teaching hours				SUS	Σ OS	ECTS
				L	S	E	Σ KN			
123412	Laboratory technologies in immunology	Prof. Jasminka Milas Ahić, MD, PhD	Prof. Jerko Babić, MD, PhD Asst. Prof. Vlatka Periša, MD, PhD Asst. Prof. Teuta Opačak-Bernardi, Mbiol, PhD Asst. Prof. Tihana Šimundić, MD, PhD	35	20	15	70	55	125	5
123413	Laboratory technologies in clinical biochemistry	Asst. Prof. Vatroslav Šerić, MMedBiochem, PhD	Asst. Prof. Sanja Mandić, MMedBiochem, PhD Marija Milić, MMedBiochem, PhD Tihana Pavošević, MMedBiochem Maja Lukić, MMedBiochem Tara Rolić, MMedBiochem	35	20	15	70	55	125	5
123410	Laboratory technologies in transfusion medicine and transplantation	Prof. Marina Samardžija, MD, PhD	Asst. Prof. Marina Ferenac Kiš, MBiol., PhD Asst. Prof. Saška Marczi, PhD Branislava Kojić Latas, MD Dejana Brkić Barbarić, MD Sandra Vitaić, MD	35	20	15	70	55	125	5
123415	Nuclear medicine methods and imaging techniques in biomedicine	Prof. Ivan Mihaljević, MD, PhD	Assoc. Prof. Mario Štefanić, Md, PhD Asst. Prof. Tomislav Kizivat, MD, PhD Ivana Marić, MD, PhD Vlado Wagenhofer, MD, PhD Dunja Mudri, MD	35	20	15	70	55	125	5
123406	Laboratory technologies in cytodiagnosics	Assoc. Prof. Biljana Pauzar, MD, PhD	Adela Benkotić, MD	35	20	15	70	55	125	5
123411	Laboratory technologies in molecular genetics and biology	Prof. Jasenka Wagner Kostadinović, MMedBiochem, PhD	Prof. Marija Heffer, MD, PhD Asst. Prof. Vedrana Ivić, MEd Biol at Chem, PhD Marta Balog, MEng Biology, PhD	35	20	15	70	55	125	5
Total elective courses				210	120	90	420	330	750	30
Elective courses required				105	60	45	210	165	375	15

* From the elective courses offered the student on the 1st year of the study have to choose at least three courses. (Elected courses I, II, III).

Legend: L - lectures; S - seminars; E - exercises; Σ KN - total hours of contact teaching; SUS – student self-learning; Σ OS - total student load; ECTS credits according to the European higher education system (1 ECTS corresponds to 25 hours of total student load)

2nd Year – Mandatory Courses

Label of subjects	Course name	Courses leader	Associates in the course	Teaching hours				SUS	Σ OS	ECTS
				L	S	E	Σ KN			
3rd semestar										
123417	Control and quality assurance in biomedical laboratory	Asst. Prof. Vatroslav Šerić, MMedBiochem, PhD	Asst. prof. Vesna Horvat, MMedBiochem, PhD Asst. Prof. Sanja Mandić, MMedBiochem, PhD Marija Milić, MMedBiochem, PhD Tara Rolić, MMedBiochem	25	20	-	45	55	100	4
123419	Medical psychology	Assoc. Prof. Ivan Požgain, MD, PhD	Sanja Jandrić, MPsyCh, PhD Marina Perković Kovačević, MPsyCh, PhD	25	15	5	45	55	100	4
123422	Management and economics in health care	Asst. Prof. Ivan Miškulin, MEngE, PhD	Prof. Maja Miškulin, MD, PhD Nika Pavlović, MBio, PhD Ivan Vukoja, MD, PhD	25	20	-	45	55	100	4
123426	Clinical medicine and laboratory diagnostics	Assoc. Prof. Tatjana Bačun, MD, PhD	Asst. Prof. Dubravka Mihaljević, MD, PhD Asst. Prof. Ružica Palić Kramarić, MD, PhD Asst. Prof. Mirjana Stupnišek, MMedLABDiagn, PhD	30	30	-	60	65	125	5
123424	Preventive medicine	Asst. Prof. Ljiljana Trtica Majnarić, MD, PhD		25	15	5	45	55	100	4
	Elected courses IV		-	25	15	5	45	30	75	3
	Elected courses V		-	25	15	5	45	30	75	3
	Elected courses VI		-	25	15	5	45	30	75	3
Total 3rd semestar				205	145	25	375	375	750	30

Label of subjects	Course name	Courses leader	Associates in the course	Teaching hours				SUS	Σ OS	ECTS
				L	S	E	Σ KN			
4th semester										
123428	Methodology of writing a scientific paper	Assoc. Prof. Mario Štefanić, MD, PhD	-	25	20	-	45	55	100	4
123433	*Individual research and thesis drafting within the project of completing master's thesis			0	40	*200	240	260	500	20
123440	Graduate thesis			-	40	-	40	110	150	6
Total 4th semester				25	100	*200	325	425	750	30
Total mandatory courses				155	200	210	565	710	1275	51
Elective courses required				75	45	15	135	90	225	9
TOTAL 2nd year:				230	245	225	700	800	1500	60

Legend: L - lectures; S - seminars; E - exercises; Σ KN - total hours of contact teaching; SUS – student self-learning; Σ OS - total student load; ECTS credits according to the European higher education system (1 ECTS corresponds to 25 hours of total student load)

2nd Year - Elective courses

Label of subjects	Elective course name	Courses leader	Associates in the course	Teaching hours				SUS	Σ OS	ECTS
				L	S	E	Σ KN			
123451	Laboratory diagnosis of infectious diseases	Assoc. Prof. Ljiljana Perić, MD, PhD	Asst. Prof. Dubravka Lišnjić, MD, PhD Asst. Prof. Domagoj Drenjančević, MD, PhD Arlen Antolović-Požgain, MD, PhD	25	15	5	45	30	75	3
123467	Laboratory diagnostics in forensic analysis	Asst. Prof. Stana Tokić, MBiolMol, PhD	Prof. Mladen Marcikić, MD, PhD Asst. Prof. Katarina Mišković Špoljarić, MEngBiotechnol, PhD Asst. Prof. Teuta Opačak-Bernardi, MBiolMol, PhD	25	15	5	45	30	75	3
123466	Clinical-toxicology analysis	Asst. Prof. Sanja Mandić, MMedBiochem, PhD	Asst. Prof. Dario Mandić, MMedBiochem, PhD Asst. Prof. Vesna Horvat, MMedBiochem, PhD Iva Lukić, MMedBiochem	25	15	5	45	30	75	3
123479	Laboratory diagnostics of neoplasms	Prof. Branko Dmitrović, MD, PhD	Prof. Sven Kurbel, MD, PhD Valerija Blažičević, MD, PhD Asst. Prof. Ksenija Marjanović, MD, PhD	25	15	5	45	30	75	3
123477	Molecular enzymology	Prof. Ljubica Glavaš-Obrovac, MEng Biotechnol, PhD	Asst. Prof. Marijana Leventić, MBiol, PhD Asst. Prof. Katarina Mišković Špoljarić, MEng, PhD	25	15	5	45	30	75	3
123486	Evidence-based medicine	Prof. Jure Mirat, MD, PhD	Prof. Ljubica Glavaš-Obrovac, MEng Biotech, PhD Prof. Maja Miškulin, MD, PhD Assoc. Prof. Vesna Ilakovac, PhD Assoc. Prof. Ana Stupin, MD, PhD Assoc. Prof. Kristina Selthofer Relatić, MD, PhD Assoc. Prof. Krešimir Šolić, MEengE, PhD Asst. Prof. Kristin Bojanić, MD, PhD	25	15	5	45	30	75	3
Total elective courses :				150	90	30	270	180	450	18
Elective courses required :				75	45	15	135	90	225	9

From the elective courses offered the student on the 2nd year of the study have to choose at least three courses. (Elected courses IV, V, VI).

Legend: L - lectures; S - seminars; E - exercises; Σ KN - total hours of contact teaching; SUS – student self-learning; Σ OS - total student load; ECTS credits according to the European higher education system (1 ECTS corresponds to 25 hours of total student load).