



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



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

DESCRIPTION OF THE STUDY 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 semestar										
240307	Introduction into biomedicine and biomedical technology	Prof. Ljubica Glavaš-Obrovac, MSc Biotechnol, PhD	Assoc.Prof. Tatjana Bačun, MD, PhD Asst. Prof. Marijana Leventić, MBiol, PhD	10	5	-	15	10	25	1
78124	Safety at work in the laboratory	Prof. Ivica Mihaljević, MD, PhD	Asst. Prof. Tomislav Kizivat, MD, PhD Asst. Prof. Tilijan Tomaš, MD, PhD	30	10	-	40	35	75	3
78128	Anatomy	Prof. Robert Selthofer, MD, PhD	Prof. Antonio Kokot, MD, PhD Prof. Igor Lekšan, MD, PhD Marta Bolješić, MD	20	5	30	55	65	120	5
200801	General and organic chemistry	Asst. Prof. Katarina Mišković Špoljarić, MEng, PhD	Asst. Prof. Teuta Opačak-Bernardi, MBiolMol, PhD Asst. Prof. Marijana Leventić, MBiol, PhD Asst. Prof. Barbara Viljetić, MEd Biol at Chem, PhD	60	15	30	105	120	225	10
78122	Biology	Asst. Prof. Vedrana Ivić, MEd Biol at Chem, PhD	Prof. Marija Heffer, MD, PhD Assoc. Prof. Jasenka Wagner Kostadinović, MMedBiochem, PhD Marta Balog, Mbiol, PhD	30	5	30	65	75	140	6
78129	Histology with laboratory technics	Prof. Tatjana Belovari, MD, PhD	Asst. Prof. Nikola Bijelić, MD, PhD Asst. Prof. Maja Tolušić-Levak, MD, PhD Edi Rođak, MBiolExp	45	15	45	105	100	205	9
133312	*Physical and health culture I	Mario Oršolić, MCin	-	-	-	(50)	(50)			
Total 1st semester				195	55	135	385	405	790	34

Label of subjects	Course name	Courses leader	Associates in the course	Teaching hours				SUS	Σ OS	ECTS
				L	S	E	Σ KN			
2nd semester										
200809	Analytical chemistry	Asst. Prof. Barbara Viljetic, MedBiol et Chem, PhD	Assoc. prof. Stana Tokić, MBiolMol, PhD Asst. Prof. Marijana Leventić, MBiol, PhD Asst. Prof. Katarina Mišković Špoljarić, MEngProc, PhD Asst. Prof. Teuta Opačak-Bernardi, MBiolMol, PhD	20	10	15	45	30	75	3
78123	Physics and biophysics	Asst. Prof. Hrvoje Brkić, MPhys, PhD	Prof. Dario Faj, MPhys, PhD Asst. Prof. Mladen Kasabašić, MPhys, PhD; Ana Ivković, , MPhys, PhD Ivana Krpan, MPhys	15	10	25	50	75	125	5
78130	Biochemistry	Prof. Ljubica Glavaš-Obrovac, MScBiotech, PhD	Assoc. Prof. Stana Tokić, MBiol Mol, PhD Assist. Prof. Marijana Leventić, Mbiol, PhD Assist. Prof. Teuta Opačak-Bernardi, MBiol Mol, PhD Assist. Prof. Barbara Viljetic, MEduBiol et Chem, PhD	30	15	15	60	70	130	5
200796	Matematics and Statistics	Assoc. Prof. Vesna Ilakovac, MEdMath, PhD	Kristina Kralik, MEdMath	25	15	25	65	65	130	5
200804	Ethics in biomedicine	Asst. Prof. Ružica Palić Kramarić, MD, PhD	Prof. Jure Mirat, MD, PhD	15	15	-	30	20	50	2
78131	Communication skills	Assoc. Prof. Ivan Požgain, MD, PhD	Sanja Jandrić, MPsyholog, PhD Marina Perković Kovačević, MPsyholog, PhD	15	-	15	30	20	50	2
78127	Medical English language I	Lorna Dubac Nemet, senior lecturer	Barbara Kružić, MEdu	-	40	-	40	20	60	2
78132	Sociology of medicine	Asst. Prof. Ivan Miškulin, MEng, PhD	Prof. Maja Miškulin, MD, PhD Nika Pavlović, MEngProc, PhD	15	5	10	30	20	50	2
Total 2nd semester				135	110	105	350	320	670	26
Total mandatory courses				330	165	240	735	725	1460	60
Elective courses required				-	-	-	-	-	-	-
TOTAL 1st year:				330	165	240	735	725	1460	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 – 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										
86203	Instrumental measuring techniques and physical methods in biomedical analytics	Prof. Ljubica Glavaš-Obrovac, MscBiotech, PhD	Prof. Tatjana Belovari, MD, PhD Asst. Prof. Marijana Leventić, MBiol, PhD Asst. Prof. Dario Mandić, MbiochemMed, PhD Asst. Prof. Katarina Mišković Špoljarić, MEngProc, PhD Asst. Prof. Teuta Opačak-Bernardi, MbiolMol, PhD Asst. Prof. Barbara Viljetić, MEduBiol et Chem, PhD	30	15	15	60	40	100	4
86192	Physiology and pathophysiology	Prof. Ines Drenjančević, MD, PhD Prof. Jasminka Milas Ahić, MD, PhD	Assoc. Prof. Ana Stupin, MD, PhD Asst. Prof. Ivana Jukić, MD, PhD Asst. Prof. Aleksandar Kibel, MD, PhD Asst. Prof. Zrinka Mihaljević, prof. Asst. Prof. Vlatka Periša, MD, PhD Asst. Prof. Marko Stupin, MD, PhD Asst. Prof. Tihana Šimundić, MD, PhD Nataša Kozina, MEd. Petar Šušnjara, MMedLabDiag	30	15	15	60	60	120	5
86207	Nuclear medicine - methods and diagnostics	Prof. Ivica Mihaljević, MD, PhD	Assoc. Prof. Mario Štefanić, MD, PhD Asst. Prof. Tomislav Kizivat, MD, PhD Katica Mijatović, MD Ivana Marić, MD, PhD Vlado Wagenhofer, MD, PhD	15	-	10	25	25	50	2
86198	Medical English language II	Lorna Dubac Nemet, senior lecturer	Barbara Kružić, MEdu	-	20	-	20	10	30	1

86194	Pathology with laboratory techniques	Assoc. Prof. Ksenija Marjanović, MD, PhD	Prof. Branko Dmitrović, MD, PhD Assoc. Prof. Milanka Mrčela, MD, PhD Asst. Prof. Jasmina Rajc, MD, PhD Andrej Kovačević, MD Sandra Nekić, MD Zlatka Radičević, MD Irena Fröhlich Zagorac, MD Marina Bakula, MMed.Lab.Diagn.	30	10	20	60	60	120	5
86201	Clinical biochemistry with laboratory technologies I	Asst. Prof. Vatroslav Šerić, MMedBiochem, PhD	Asst. Prof. Vesna Horvat, MMedBiochem, PhD Asst. Prof. Sanja Mandić, MMedBiochem, PhD Vikica Buljanović, MMedBiochem, PhD Maja Lukić, MMedBiochem Tihana Pavošević, MMedBiochem Tara Rolić, MMedBiochem	30	10	30	70	70	140	6
86210	Clinical course I: Clinical biochemistry I	Asst. Prof. Vatroslav Šerić, MMedBiochem, PhD	Assoc. Prof. Željko Debeljak, MMedBiochem, PhD Asst. Prof. Dario Mandić, MMedBiochem, PhD Maja Lukić, MMedBiochem Tihana Pavošević, MMedBiochem Tara Rolić, MMedBiochem	5	5	30	40	30	70	3
86211	Clinical course II: Pathology	Assoc. Prof. Ksenija Marjanović, MD, PhD	Assoc. Prof. Martina Mihalj, MD, PhD Assoc. Prof. Milanka Mrčela, MD, PhD Asst. Prof. Jasmina Rajc, MD, PhD Andrej Kovačević, MD Sandra Nekić, MD Marina Bakula, MMed.Lab.Diagn. Monika Galić Krnjajić, MMed.Lab.Diagn.	5	5	30	40	30	70	3
151043	Physical and health culture II	Mario Oršolić, MCin	-	-	-	(50)	(50)	-	-	
Total 3rd semester				145	80	150	375	325	700	29

Label of subjects	Course name	Courses leader	Associates in the course	Teaching hours				SUS	Σ OS	ECTS
				L	S	E	Σ KN			
4th semester										
86204	Molecular biology with laboratory technologies	Asst. Prof. Teuta Opačak-Bernardi, MMolBiol, PhD	Prof. Ljubica Glavaš-Obrovac, MscBiotechnol, PhD Asst. Prof. Stana Tokić, MMolBiol, PhD	30	15	15	60	65	135	5
86206	Hematology with laboratory technologies	Asst. Prof. Vlatka Periša, MD, PhD	Assoc. Prof. Stana Tokić, MMolBiol, PhD Stefan Mrđenović, PhD Maja Lukić, MMedBiochem	45	5	45	95	80	175	7
86208	Immunology with laboratory technologies	Prof. Ines Drenjančević, MD, PhD	Assoc. Prof. Ana Stupin, MD, PhD Asst. Prof. Ivana Jukić, MD, PhD Asst. Prof. Zrinka Mihaljević, Med Biol et Chem, PhD Nataša Kozina, Med Biol et Chem Petar Šušnjara, MMedLabDiag	30	5	15	50	50	100	4
86209	Human genetics	Prof. Jasenka Wagner Kostadinović, MMedBiochem, PhD	Prof. Marija Heffer, MD, PhD Asst. Prof. Vedrana Ivić, MEdBiol, PhD	15	5	15	35	35	70	3
86197	Public health with the basics of legal regulation	Prof. Maja Miškulin, MD, PhD	Asst. Prof. Ivan Miškulin, MEng, PhD Nika Pavlović, PhD	15	15	0	30	15	45	2
86212	Clinical course III: Hematology	Asst. Prof. Dario Mandić, MMedBiochem, PhD	Asst. Prof. Vlatka Periša, MD, PhD Marija Milić, MMedBiochem, PhD Danijela Mjeda, MD Maja Lukić, MMedBiochem	10	10	60	80	60	140	6
	**Elective course II/1			20	10	30	60	40	100	4
Total 4th semester				165	65	180	410	345	765	31
Total mandatory courses				290	135	300	725	630	1365	56
Elective courses required				20	10	30	60	40	100	4
TOTAL 2nd year:				310	145	330	785	670	1465	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); *not an integral part of the teaching load. ** From the elective courses offered, students have to choose one course.

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			
86213	Health ecology and hygiene of the working environment	Prof. Maja Miškulin, MD PhD	Nika Pavlović, MEngProc, PhD	20	10	30	60	40	100	4
86215	Experimental methods in laboratory biomedicine I	Asst. Prof. Barbara Viljetic, MEdBio et Chem, PhD Prof. Ines Drenjančević, MD, PhD	Asst. prof. Katarina Mišković Špoljarić, MEngProc, PhD Asst. Prof. Teuta Opačak-Bernardi, MBiolMol, PhD Asst. Prof. Marijana Leventić, MBiol, PhD Asst. Prof. Zrinka Mihaljević, MEdBiol et Chem, PhD	20	10	30	60	40	100	4
86216	Fundamentals of scientific research	Prof. Ivica Mihaljević, MD, PhD	Asst. Prof. Tomislav Kizivat, MD, PhD Ivana Marić, MD, PhD Katica Mijatović, MD Vlado Wagenhofer, MD, PhD Marija Kordić Brandić, MD Hrvoje Delalić, MD	20	10	30	60	40	100	4
Total elective courses				60	30	90	180	160	300	12
Elective courses required				20	10	30	60	40	100	4

** From the elective courses offered, students have to choose at least one course.

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)

3rd 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			
5th semestar										
94385	Medical microbiology with laboratory technologies I	Assoc. Prof. Domagoj Drenanjčević, MD, PhD	Asst. Prof. Arlen Antolović-Požgain, MD, PhD Asst. Prof. Maja Bogdan, MD, PhD Maja Tomić-Paradžik, MD, PhD Marijan Orlović, MD Marko Živkov, MD Ivana Roksandić- Križan, MD Sara Kibel, MD Dinko Paulić, MD	45	15	15	75	50	125	5
94390	Clinical biochemistry with laboratory technologies II	Asst. Prof. Vatroslav Šerić, MMedBiochem, PhD	Asst. Prof. Vesna Horvat, MMedBiochem, PhD Asst. Prof. Dario Mandić, MMedBiochem, PhD Asst. Prof. Sanja Mandić, MMedBiochem, PhD Marija Milić, MMedBiochem, PhD Tihana Pavošević, MMedBiochem Maja Grabić, MMedBiochem Maja Lukić, MMedBiochem	30	5	45	80	75	155	6
94386	Clinical cytology	Asst. Prof. Branka Lončar, MD, PhD	Assoc. Prof. Valerija Miličić, MD, PhD Asst. Prof. Marija Perić, MD, PhD Adela Benkotić, MD	30	5	15	50	50	100	4

94387	Transfusion medicine with laboratory technologies	Assoc. Prof. Marina Samardžija, MD, PhD	Asst. Prof. Marina Ferenac Kiš, MBiolMol, PhD Asst. Prof. Irena Jukić, MD, PhD Asst. Prof. Saška Marczi, MEdBiol et Chem, PhD Branislava Kojić Latas, MD Dejana Brkić Barbarić, MD Maja Marijanović, MD Sandra Vitaić, MD	15	5	15	35	40	75	3
94388	Clinical course IV: Clinical cytology	Asst. Prof. Branka Lončar, MD, PhD	Assoc. Prof. Valerija Miličić, MD, PhD Asst. Prof. Marija Perić, MD, PhD Adela Benkotić, MD	5	5	30	40	40	80	3
94389	Clinical course V: Transfusion medicine	Assoc. Prof. Marina Samardžija, MD, PhD	Asst. Prof. Marina Ferenac Kiš, MBiolMol, PhD Asst. Prof. Irena Jukić, MD, PhD Asst. Prof. Saška Marczi, MEdBiol et Chem, PhD Branislava Kojić Latas, MD Dejana Brkić Barbarić, MD Maja Marijanović, MD Sandra Vitaić, MD	5	5	30	40	40	80	3
94392	Clinical interpretations of laboratory findings	Assoc. Prof. Tatjana Bačun, MD, PhD	Assoc. Prof. Aleksandar Kibel, MD, PhD Assoc. Prof. Dubravka Mihaljević, MD, PhD Assist. Prof. Mirjana Stupnišek, MMedLabDiag, PhD Ivana Tolj, MD	15	5	30	50	50	100	4
200765	Biomedical informatics and laboratory data processing	Assoc. Prof. Krešimir Šolić, MEEng, PhD	Asst. Prof. Mirko Pešić, MEcon, PhD	5	5	20	30	30	60	2
Total 5th semester				195	55	135	385	405	790	34

Label of subjects	Course name	Courses leader	Associates in the course	Teaching hours				SUS	Σ OS	ECTS
				L	S	E	Σ KN			
6th semester										
94391	Medical microbiology with laboratory technologies II	Assoc. Prof. Domagoj Drenanjčević, MD, PhD	Asst. Prof. Arlen Antolović-Požgain, MD, PhD Asst Prof. Maja Bogdan, MD, PhD Maja Tomić-Paradžik, MD, PhD Marijan Orlović, MD Marko Živkov, MD Ivana Roksandić-Križan, MD Sara Kibel, MD Dinko Paulić, MD	30	15	15	60	40	100	4
94394	Clinical course VI: Clinical biochemistry II	Prof. Jasenka Wagner, MMedBiochem, PhD	Asst. Prof. Vatroslav Šerić, MMedBiochem, PhD Marija Milić, MMedBiochem, PhD Jelena Omazić, MMedBiochem Tihana Pavošević, MMedBiochem	10	10	60	80	70	150	6
94395	Clinical course VII: Medical microbiology	Assoc. Prof. Domagoj Drenanjčević, MD, PhD	Asst. Prof. Arlen Antolović-Požgain, MD, PhD Asst Prof. Maja Bogdan, MD, PhD Maja Tomić-Paradžik, MD, PhD Marijan Orlović, MD Marko Živkov, MD Ivana Roksandić-Križan, MD Sara Kibel, MD Dinko Paulić, MD	10	10	60	80	70	150	6
	**Elective course III/1			20	10	30	60	40	100	4
125085	Bachelor's thesis			-	-	150	150	-	-	10
Total 6th semester				70	45	165	280	220	500	30
Total mandatory courses				200	85	335	620	555	1175	56
Elective courses required				20	10	30	60	40	100	4
TOTAL 3rd year:				220	95	365	680+150	595	1275	60

** From the elective courses offered, students have to choose one course.

3rd 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			
94396	Experimental methods in laboratory biomedicine II	Assoc. Prof. Stana Tokić, MbiolMol, PhD	Asst. Prof. Barbara Viljetić, MEdBiol et Chem, PhD Asst. Prof. Saška Marczi, MEdBiol et Chem, PhD Asst. Prof. Teuta Opačak Bernardi, MbiolMol, PhD Maja Jirouš, MMedLabDiag	20	10	30	60	40	100	4
94397	Bloodborne diseases	Assoc. Prof. Marina Samardžija, MD, PhD	Asst. Prof. Marina Ferenac Kiš, MBiolMol, PhD Asst. Prof. Irena Jukić, MD, PhD Asst. Prof. Saška Marczi, MEdBiol et Chem, PhD Branislava Kojić Latas, MD Dejana Brkić Barbarić, MD Maja Marijanović, MD Sandra Vitić, MD	20	10	30	60	40	100	4
Total elective courses :				40	20	60	120	80	200	8
Elective courses required :				20	10	30	60	40	100	4

** From the elective courses offered, students have to choose one course.

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